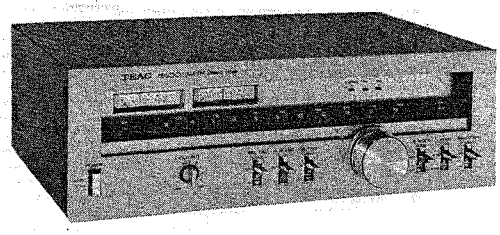
TEAC®



SERVICE MANUAL

TX-500/TX-300

AM/FM Stereo Tuner

CONTENTS

1. Specifications and service data 2
2. Dial cord conversion and voltage voltage conversion 3
3. Parts location and required equipment 4
4. Adjustments 6
5. Block diagram 16
6. Exploded views and parts list 18
7. PC Boards and parts list 22

CAUTION

⚠ Parts marked with this sign are safety critical components. They must always be replaced with identical components - refer to the TEAC Parts List and ensure exact replacement.

GC-90046

5704001400

1 SPECIFICATIONS AND SERVICE DATA

FM Tuner Section

	TX-500	TX-300
Tuning Range	88 MHz – 108 MHz	88 MHz – 108 MHz
Antenna Impedance	300 ohms balanced/ 75 ohms unbalanced	300 ohms balanced/ 75 ohms unbalanced
Usable Sensitivity (New IHF)	13 dBf	13 dBf
50 dB Quieting Sensitivity (New IHF)	MONO 22 dBf STEREO 41 dBf	MONO 22 dBf STEREO 43 dBf
Signal-to-Noise Ratio	MONO 68 dB STEREO 65 dB	MONO 68 dB STEREO 60 dB
Capture Ratio	1.5 dB	1.5 dB
AM Suppression Ratio	55 dB	50 dB
Image Response Ratio	70 dB	48 dB
IF Response Ratio	90 dB	78 dB
Spurious Response Ratio	86 dB	70 dB
Selectivity	60 dB	50 dB
Harmonic Distortion	MONO 0.08% STEREO 0.12%	MONO 0.2% STEREO 0.2%
Stereo Separation	50 dB	43 dB
Frequency Response	30 Hz – 15 kHz ±1 dB	30 Hz – 15 kHz ±1 dB
Output Level/Impedance	VARIABLE 30 mV – 900 mV 300 Ω – 2.8 kΩ FIXED 470 mV	550 mV/1 kΩ

AM Tuner Section

	TX-500	TX-300
Tuning Range	525 kHz – 1605 kHz	525 kHz – 1605 kHz
Antenna Impedance	Ferrite Bar Antenna w/Outside Terminal	Ferrite Bar Antenna w/Outside Terminal
Sensitivity	30 μV	30 μV
Signal-to-Noise Ratio	45 dB	45 dB
Image Response Ratio	45 dB	45 dB
Selectivity	20 dB	20 dB
Harmonic Distortion	1.0%	1.0%
Output Level/Impedance	FIXED 300 mV	300 mV/1 kΩ

General

	TX-500	TX-300
Dimensions (WHD)	410 x 140 x 296 mm	410 x 140 x 296 mm
Weight	6.5 kg	6.0 kg
Power Requirements and Consumption		

Model	Voltage (V)	Frequency (Hz)	Comsumption (W)
GENERAL EXPORT	100,117,220,240	50/60	9
EUROPE	220	50	9
U.K./AUS.	240	50	9
U.S.A./CANADA	117	60	9

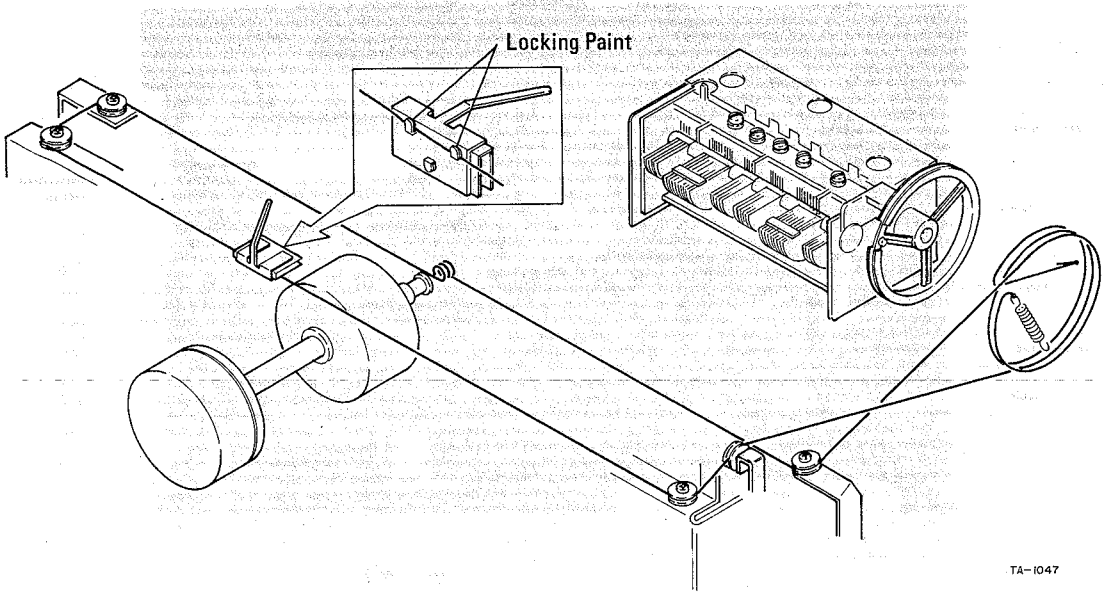
The power requirements for products distributed in certain countries of Europe, U.K., Australia, Canada and the United States are not adjustable.

- Imprevements may result in features or specifications change without notice.

2 DIAL CORD STRING PATH AND VOLTAGE CONVERSION

2-1 DIAL CORD STRING PATH

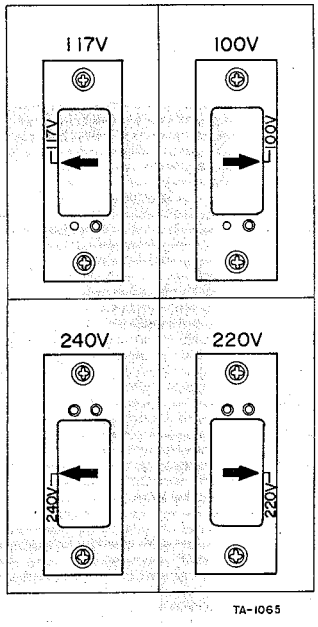
NOTE: Prior to removing old dial cord for replacement, carefully inspect winding path and connection method to insure that new dial cord string can be properly installed.
Applicable both models.



2-2 VOLTAGE CONVERSION (GENERAL EXPORT MODEL ONLY)

NOTE: Be sure to remove the power cord from the ac outlet before removing the outer case and repositioning the voltage conversion plug.

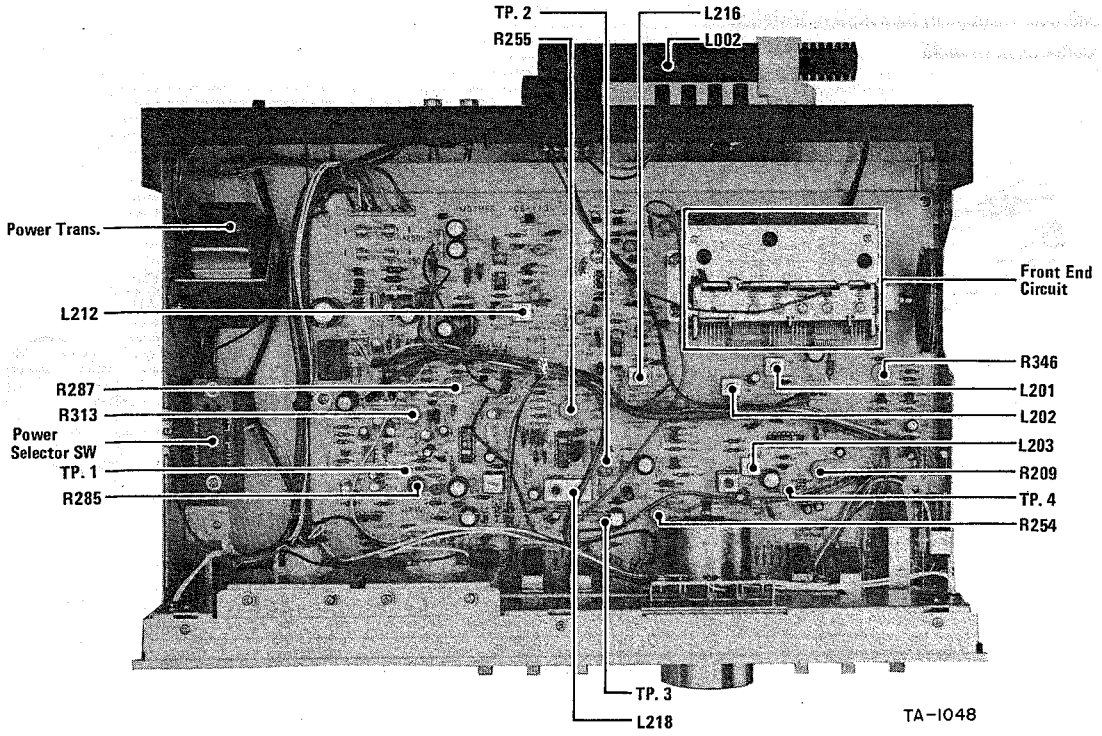
1. Remove the top and side metal cover by removing screws in each side of the metal cover.
2. Locate the voltage selector plug on the left side of the TX-500, TX-300.
3. Remove the plug by pulling it out and re-install it so that the arrow on the plug exactly lines up with the white line that goes to the proper indicated voltage.
4. Replace the top cover.



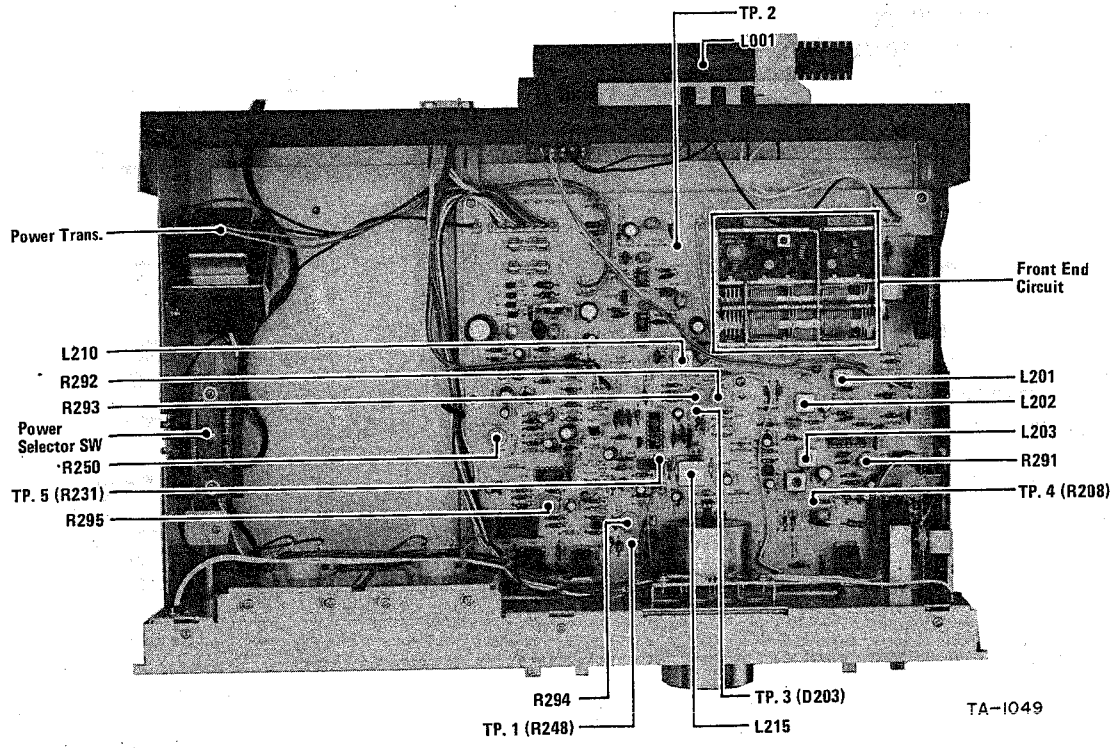
3 PARTS LOCATION AND REQUIRED EQUIPMENT

3-1 PARTS LOCATION

TX-500

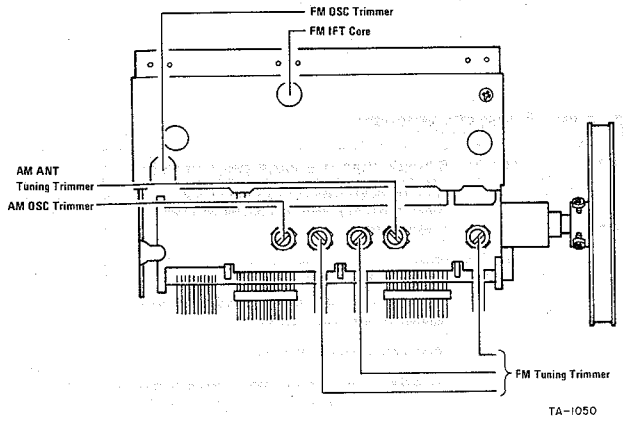


TX-300

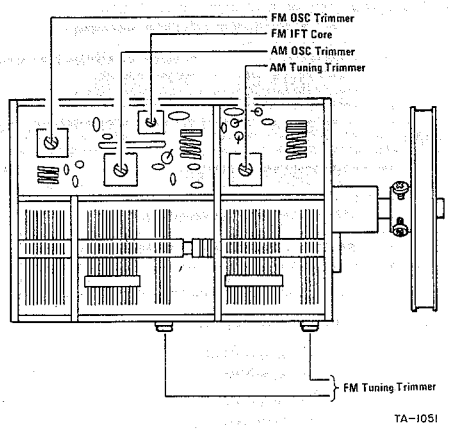


3-2 FRONT END SECTION PARTS LOCATION

TX-500



TX-300



3-3 REQUIRED EQUIPMENT

IF SWEEMAR SCOPE VP-8911A
VHF SWEEMAR SCOPE VP-8914A
MW SWEEMAR SCOPE VP-8912A
MW Sweemar Scope
AM Signal Generator
Distortion Meter
Stereo Modulator
Frequency Counter
AC V.T.V.M

GENERAL NOTICE

Overall adjustment and alignment procedures are outlined below. The TX-500, TX-300 Tuners utilize the latest circuitry and most modern materials and techniques. Since the both Tuners are similar in design to those of other leading manufacturers, general alignment and servicing procedures may be followed. However, if you do not possess the required test equipment or should you fail to understand the circuit operation, alignment should not be attemped.

4 ADJUSTMENTS

4-1 TX-500

FM ADJUSTMENTS PROCEDURE

ITEM		PREPARATORY SETTING	INPUT	ADJUSTING POINT	OUTPUT	ADJUSTMENT	REMARKS
Common to all items		SELECTOR: FM					
1. FM IF ADJ.		IF SWEEMAR SCOPE setting MODE :FM (INTENSITY KNOB PULL) RF OUT dB : 80~90 dB SWEEP (CENTER & WIDTH) : Set the IF SWEEMAR SCOPE for correct observation of the IF pass characteristic.					
	1-1	IF MODE: WIDE	Pin No. 4	L212	TP. 2	Check that the wave peak is near the center marker frequency (10.7 MHz) and maximize the wave peak.	Fig. 1
	1-2	IF MODE: NARROW (After adjustment, switch to WIDE)		L216			
2. TRACKING ADJ.		VHF SWEEMAR SCOPE setting Marker frequencies A: 87.4MHz B: 93MHz C: 98MHz D: 108MHz E: 109MHz	ANT (300Ω)		TP.2	Center & Width: Set so as to make all five marker frequencies appear on the scope. RF OUT dB: 30 dB GAIN: Set for correct observation of the vertical sensitivity and position.	Fig. 2
	2-1	Dial pointer: at the right end		OSC Trimmer (Front end)		Adjust so that the wave peak matches marker frequency E.	Fig. 3-1
	2-2	Dial pointer: at the left end				Check if the wave peak matches marker frequency A.	Fig. 3-2
	2-3	Turn the tuning knob so that the wave peak matches marker D.		Tuning Trimmer (3pcs.) (Front end)		Maximize the wave peak.	Fig. 3-3
	2-4	Turn the tuning knob so that the wave peak matches marker C.		IFT core (Front end)		Maximize the wave peak.	Fig. 3-4
After adjustment in item 3-2, set as follows. REC CAL: OUT HI BLEND: OUT MUTING: OUT MODE: MONO		FM SG setting Frequency: 98MHz MODULATION: 1kHz 100% (75kHz deviation) Set the output level so that the TX-500 input is 50-60 dBf (Note 1).					
3. DETECTOR ADJ.	3-1	Stop input to TX-500.		Primary side of L218 (right core)		Adjust the tuning meter so that the pointer comes to the center.	Fig. 4
	3-2		ANT (300Ω)	Secondary side of L218 (Left core)	OUTPUT (VARIABLE)	Adjust to minimize the Lch output distortion factor (Repeat 3-1 and 3-2.)	Fig. 5
4. INPUT METER ADJ.	4-1	Set the FM SG output level so that the TX-500 ANT input is 65 dBf.	ANT (300Ω)	R254		Make adjustment so that the input pointer meter indicates 5th graduation.	
5. MUTING ADJ.	5-1	MUTING: IN (After adjustment of MUTING, set to OUT.) Set the FM SG output level so that the TX-500 ANT input is 19 dBf.	ANT (300 Ω)	R255	OUTPUT (VARIABLE)	Adjust so that the muting is fully effective.	
6. MPX SECTION ADJ.	6-1	Stop the FM SG modulation. Set the FM SG output level so that the TX-500 ANT input is 65 dBf.	ANT (300Ω)	R285	TP.1	Adjust so that the frequency counter indicates somewhere between 75.950 and 76.050kHz. (VCO ADJ)	Fig. 6
	6-2	MODE: AUTO Set the FM SG to external stereo modulation. (Note 2) Set the stereo modulator output to the pilot signal only.		R287	OUTPUT (VARIABLE)	Adjust so that the pilot leakage level at Lch terminal is minimized. (PILOT CANCEL ADJ.)	Fig. 7

7. SEPARATION ADJ.	7-1	(IF MODE: WIDE) Set the stereo modulator to Rch (1kHz) and pilot.	ANT (300Ω)	R314	OUTPUT (VARIABLE)	Minimize the Lch output pilot leakage and 1kHz leakage level.	
	7-2	IF MODE: NARROW (After the adjustment, switch to WIDE.)		R313			
8. REC CAL ADJ.	8-1	REC CAL: IN Reset the FM SG to internal modulation with 400 Hz, 67% modulation (50kHz deviation)	ANT (300Ω)	R346	OUTPUT (VARIABLE)	Adjust so that the output level is equal for REC CAL IN and OUT.	

AM ADJUSTMENTS PROCEDURE

ITEM		PREPARATORY SETTING	INPUT	ADJUSTING POINT	OUTPUT	ADJUSTMENT	REMARKS
Common to all items		SELECTOR: AM	Disconnect the bar antenna from the rod holder.				
1. AM IF ADJ.		IF SWEEMAR SCOPE setting MODE: AM (INTENSITY KNOB NORM) RF OUT dB: 40~50 dB SWEEP (CENTER & WIDTH), GAIN : Set the IF SWEEMAR SCOPE for correct observaion of the IF pass characteristic.					
	1-1	Dial pointer: at the left end Input signal: 460kHz (GENERAL EXPORT, U.K., EUROPE, AUSTRALIA,) 455kHz (U.S.A., CANADA)	AM ANT TERMINAL	L202 L203	TP. 4	Check that the wave peak matches the 460kHz (455kHz) marker. Adjust to maximize the wave peak and to obtain a symmetrical waveform.	Fig. 8
2. TRACKING ADJ.		MW SWEEMAR SCOPE setting Marker frequencies A: 522kHz B: 600kHz C: 1000kHz D: 1400kHz E: 1647kHz	Bar ANT		TP. 4	CENTER & WIDTH: Adjust to make all 5 markers appear on the scope. RF OUT dB: 80 dB~90 dB GAIN: Adjust for correct observation of vertical sensitivity and position. (Note 3)	Fig. 9
	2-1	Dial pointer: at the left end		L201 (OSC Coil)		Adjust so that the wave peak matches marker A.	Fig. 10-1
	2-2	Dial pointer: at the right end		OSC Trimmer		Adjust so that the wave peak matches marker E.	Fig. 10-2
	2-3	Turn the tuning knob so that the wave peak matches marker B.		L002 (Bar ANT)		Maximize the wave peak.	Fig. 10-3
	2-4	Turn the tuning knob so that the wave peak matches marker D.		ANT Tuning Trimmer		Maximize the wave peak. (Repeat steps 2-1 through 2-4.)	Fig. 10-4
3. INPUT MTER ADJ.	3-1	Set the AM SG as follows: Frequency: 1000kHz Output: 100 dB at 1kHz 30% modulation Turn the TX-500 to minimize the output distortion factor.	AM ANT TERMINAL Insert 200pF in series.	R209		Adjust so that Input indicates the 5th graduation.	Fig. 11

4-2 TX-300

FM ADJUSTMENTS PROCEDURE

ITEM		PREPARATORY SETTING	INPUT	ADJUSTING POINT	OUTPUT	ADJUSTMENT	REMARKS
Common to all items		SELECTOR: FM					
1. FM IF ADJ.		IF SWEEMAR SCOPE setting MODE :FM (INTENSITY KNOB PULL) RF OUT dB : 60~70 dB SWEEP (CENTER & WIDTH) : Set the IF SWEEMAR SCOPE for correct observation of the IF pass characteristic.					
	1-1		TP. 2	L210	TP. 3	Check that the wave peak is near the center marker frequency (10.7 MHz) and maximize the wave peak.	
2. TRACKING ADJ.		VHF SWEEMAR SCOPE setting Marker frequencies A: 87.4MHz B: 93MHz C: 98MHz D: 108MHz E: 109MHz	ANT (300Ω)		TP.3	Center & Width: Set so as to make all five marker frequencies appear on the scope. RF OUT dB: 20 dB GAIN: Set for correct observation of the vertical sensitivity and position.	
	2-1	Dial pointer: at the right end		OSC Trimmer (Front end)		Adjust so that wave peak matches marker frequency E.	Fig. 3-1
	2-2	Dial pointer: at the left end				Check if the wave peak matches marker frequency A.	Fig. 3-2
	2-3	Turn the tuning knob so that the wave peak matches marker D.		Tuning trimmer. (2 pcs.) (Front end)		Maximize the wave peak.	Fig. 3-3
	2-4	Turn the tuning knob so that the wave peak matches marker C.		IFT core (Front end)		Maximize the wave peak.	Fig. 3-4
After adjustment in item 3-2, set as follows. HI BLEND: OUT MUTING: OUT MODE: MONO		FM SG setting Frequency: 98MHz MODULATION: 1kHz 100% (75kHz deviation) Set the output level so that the TX-300 input is 50 ~ 60 dBf (Note 1).					
3. DETECTOR ADJ.	3-1	Stop input to TX-300.		Primary side of L215 (Under core)		Adjust the tuning meter so that the pointer comes to the center.	Fig. 4
	3-2		ANT (300Ω)	Secondary side of L215 (Upper core)	OUTPUT	Adjust to minimize the Lch output distortion factor (Repeat 3-1 and 3-2.)	
4. INPUT METER ADJ.	4-1	Set the FM SG output level so that the TX-300 ANT input is 65 dBf.	ANT (300Ω)	R292		Make adjustment so that the input pointer meter indicates 5th graduation.	
5. MUTING ADJ.	5-1	MUTING: IN (After adjustment of MUTING, set to OUT.) Set the FM SG output level so that the TX-300 ANT input is 19 dBf.	ANT (300Ω)	R293	OUTPUT	Adjust so that the muting is fully effective.	
6. MPX SECTION ADJ.	6-1	Stop the FM SG modulation. Set the FM SG output level so that the TX-300 ANT input is 65 dBf.	ANT (300Ω)	R294	TP.1	Adjust so that the frequency counter indicates somewhere between 75.960 and 76.050kHz. (VCO ADJ)	
	6-2	MODE: AUTO Set the FM SG to external stereo modulation. (Note 2) Set the stereo modulator output to the pilot signal only.		R250	OUTPUT	Adjust so that the pilot leakage level at Lch terminal is minimized. (PILOT CANCEL ADJ.)	

7. SEPARATION ADJ.	7-1	Set the stereo modulator to Rch (1kHz) and pilot.	ANT (300Ω)	R295	OUTPUT	Minimize the Lch output pilot leakage and 1kHz leakage level.	

AM ADJUSTMENTS PROCEDURE

ITEM		PREPARATORY SETTING	INPUT	ADJUSTING POINT	OUTPUT	ADJUSTMENT	REMARKS
Common to all items SELECTOR: AM Disconnect the bar antenna from the rod holder.							
1. AM IF ADJ.		IF SWEEMAR SCOPE setting MODE: AM (INTENSITY KNOB NORM) RF OUT dB: 40~50 dB SWEEP (CENTER & WIDTH), GAIN : Set the IF SWEEMAR SCOPE for correct observation of the IF pass characteristic.					
	1-1	Dial pointer: at the left end Input signal: 460 k Hz (GENERAL EXPORT, U.K., EUROPE, AUSTRALIA,) 455 k Hz (U.S.A., CANADA)	AM ANT TERMINAL	L202 L203	TP. 4	Check that the wave peak matche the 460 k Hz (455 k Hz) marker. Adjust to maximize the wave peak and to obtain a symmetrical waveform.	
2. TRACKING ADJ.		MW SWEEMAR SCOPE setting Marker frequencies A: 522kHz B: 600kHz C: 1000kHz D: 1400kHz E: 1647kHz	Bar ANT		TP. 4	CENTER & WIDTH: Adjust to make all 5 markers appear on the scope. RF OUT dB: 80 dB~90 dB GAIN: Adjust for correct observation of vertical sensitivity and position. (Note 3)	
	2-1	Dial pointer: at the left end		L201 (OSC Coil)		Adjust so that the wave peak matches marker A.	Fig. 10-1
	2-2	Dial pointer: at the right end		OSC Trimmer		Adjust so that the wave peak matches marker E.	Fig. 10-2
	2-3	Turn the tuning knob so that the wave peak matches marker B.		L001 (Bar ANT)		Maximize the wave peak.	Fig. 10-3
	2-4	Turn the tuning knob so that the wave peak matches marker D.		ANT Tuning Trimmer		Maximize the wave peak. (Repeat steps 2-1 through 2-4.)	Fig. 10-4
3. INPUT MTER ADJ.	3-1	Set the AM SG as follows: Frequency: 1000 k Hz Output: 100 dB at 1 kHz 30% modulation Turn the TX-300 to minimize the output distortion factor.	AM ANT TERMINAL Insert 200pF in series.	R291		Adjust so that Input indicates the 5th graduation.	

NOTE 1. The relation between antenna input power (dBf) and SG output level is as follows: (For a 300Ω antenna)

A. When the output level indication is the open end output voltage (dBμ) (National SG)

dBf = SG output level (dB) −6.8 dB

SG output scale (dB) = dBf +6.8

B. When the output level indication is the matched end output volatge (dBμ) (Meguro SG)

dBf = SG output level −0.8 dB

SG output scale (dB) = dBf +0.8

NOTE 2. The relation between the output component ratio of the stereo modulator and the SG external modulation must preliminary be set as follows:

Output component ratio of stereo modulator:

L + R = 91%, Pilot 9%
(Main signal (L=R) and pilot only)

L = 91%, Pilot 9% (R=0 signal)

R = 91%, Pilot 9% (L=0 signal)

L − R = 91%, Pilot 9%
(Subsignal (L+R=0) and pilot only)

SG modulation degree shall be 100% (75 kHz deviation) for each of the above output.

NOTE 3. The AGC of the receiver is ineffective because the carrier wave is swept at 25 Hz intervals by the sweep generator. The output from Pin 12 of U 201 may be saturated. If so the output level must be reduced below 100 dB. (If the output is saturated, TRACKING adjustment cannot be done.)

Data: The relation between the output level of the MW SWEEMAR SCOPE (or AM SG) and the field intensity around the bar antenna is given as follows for the setting shown in Fig. 8:

When the output level indication is the open end output voltage (dBμ) (National SWEEMAR SCOPE and Megro AM SG)

$\mu V/W = 1/20 \times 10^{A}$ (A=output level/20)

When the output level indication is the matched end output voltage (dBμ)

$\mu V/W = 1/10 \times 10^{B}$ (B=output level/20)

Example: When the output level indication is the open end output voltage (dBμ)

Output scale	100 dB	5 mV/W
	80 dB	500 μV/W
	74 dB	250 μV/W

4-3 TEST CONNECTIONS AND WAVE FORM

In case of test connections, connect to each input and output of TX-300 same as TX-500.

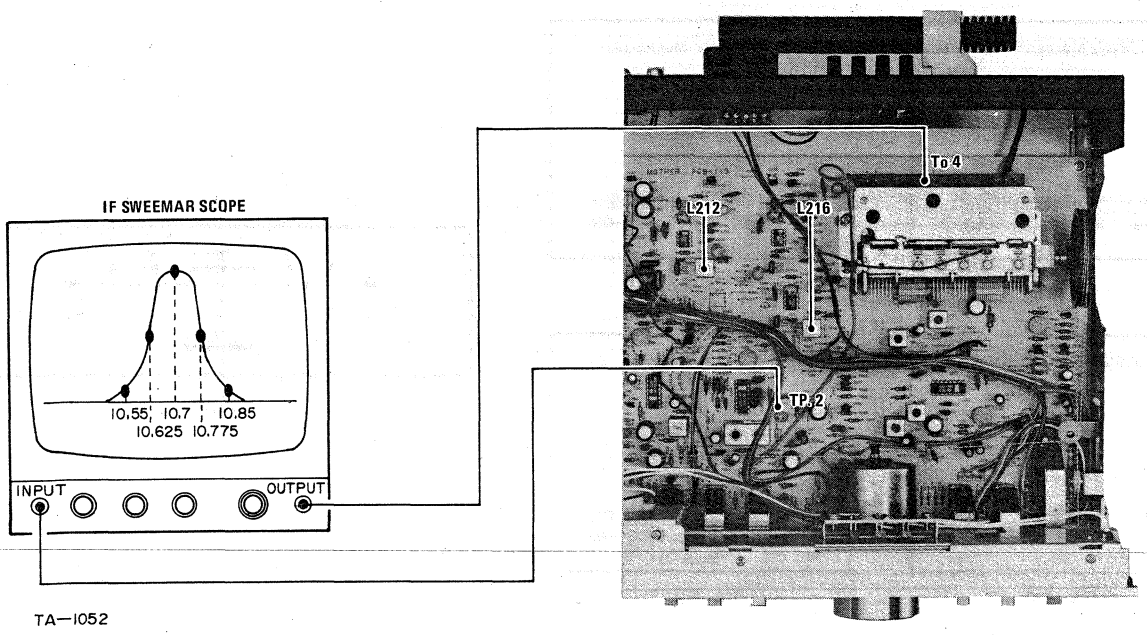


Fig. 1

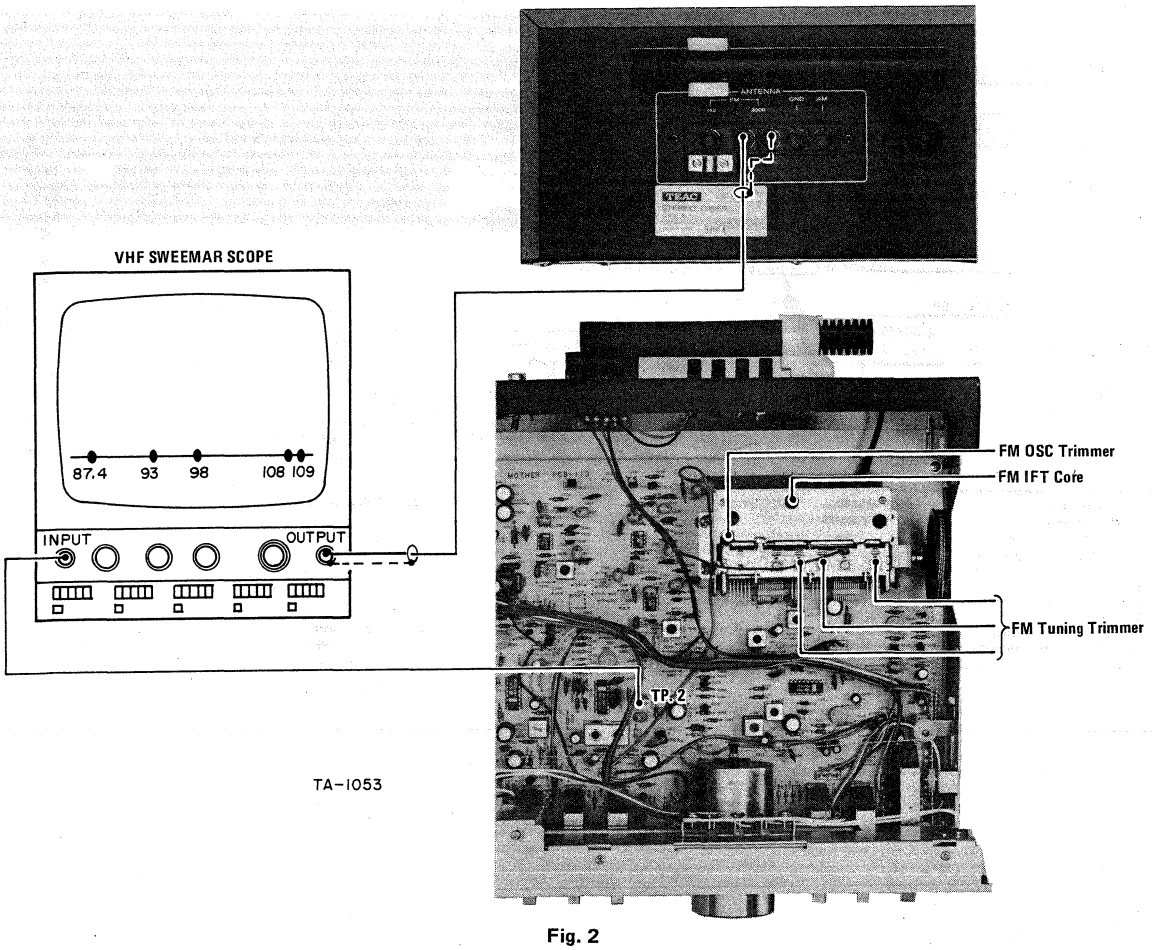


Fig. 2

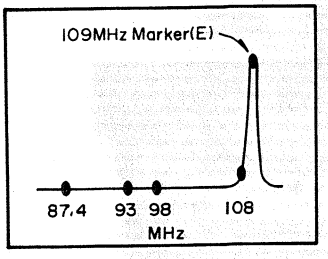


Fig. 3-1

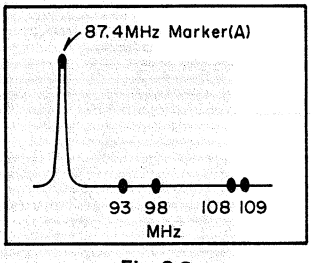


Fig. 3-2

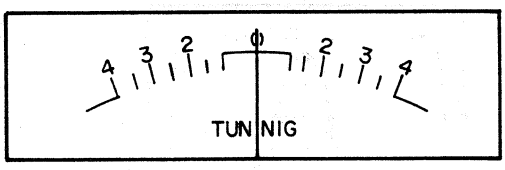


Fig. 4

TA-1055

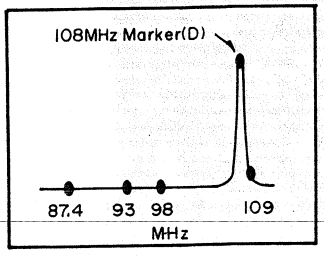


Fig. 3-3

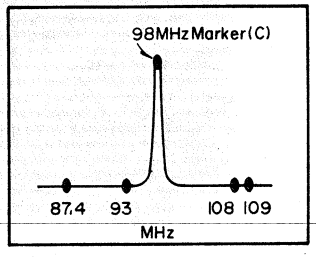
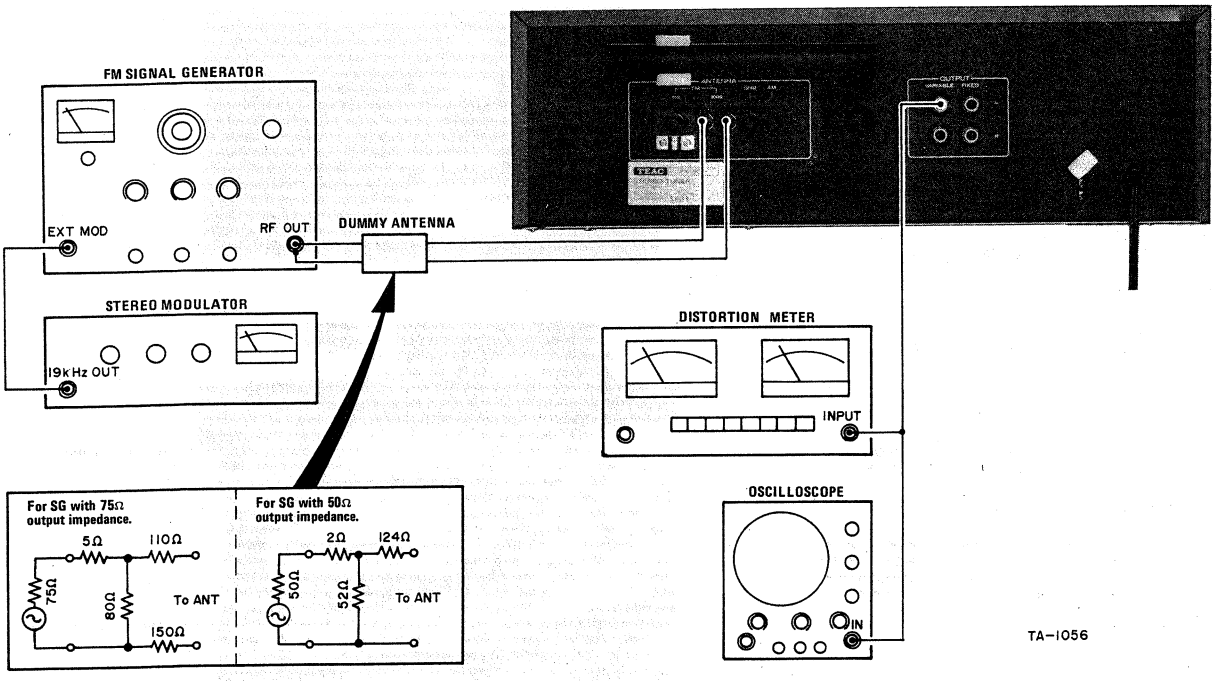


Fig. 3-4

TA-1054



TA-1056

Fig. 5

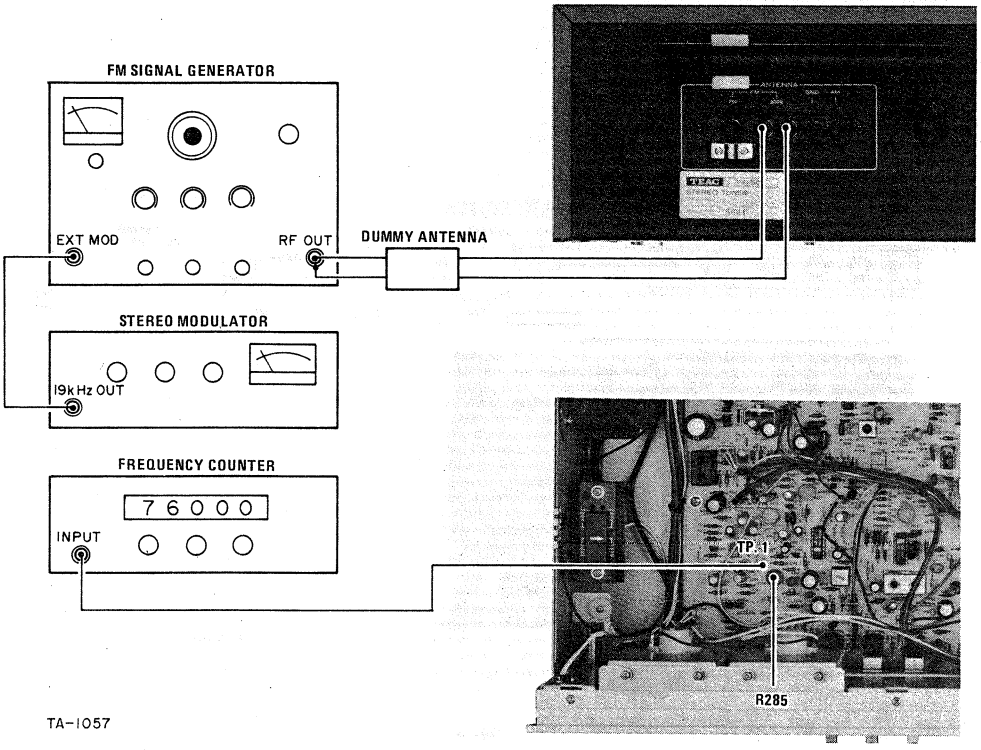

FM SIGNAL GENERATOR
EXT MOD
RF OUT
DUMMY ANTENNA
STEREO MODULATOR
19kHz OUT
FREQUENCY COUNTER
76000
INPUT
TP-1
R285
TA-1057

Fig. 6

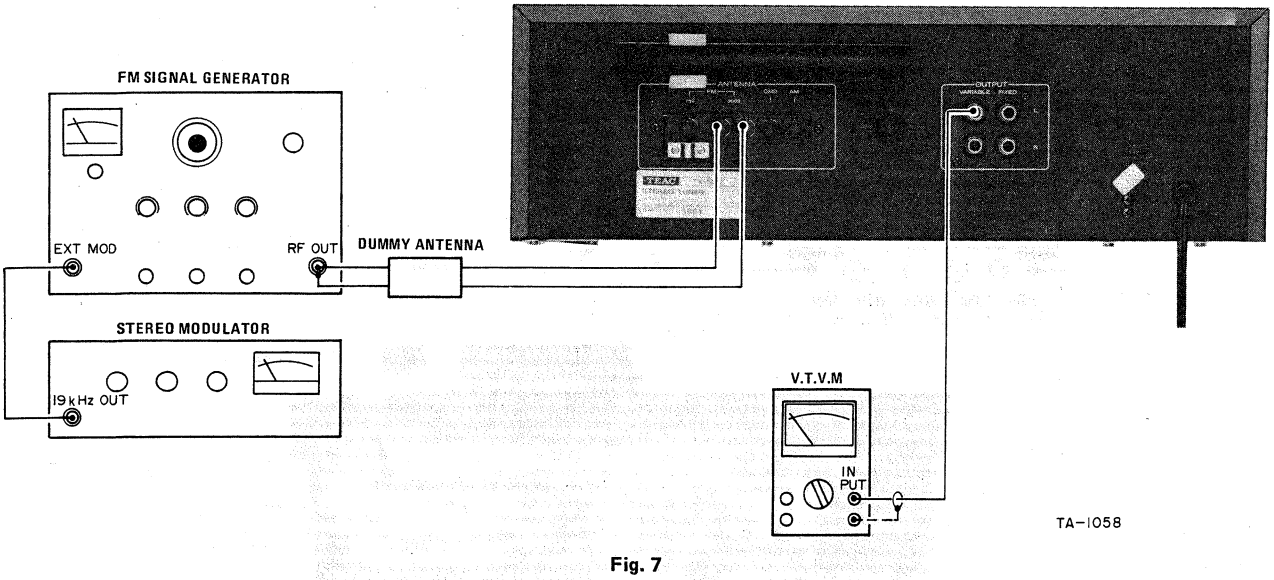

FM SIGNAL GENERATOR
EXT MOD
RF OUT
DUMMY ANTENNA
STEREO MODULATOR
19kHz OUT
V.T.V.M
IN
PUT
TA-1058

Fig. 7

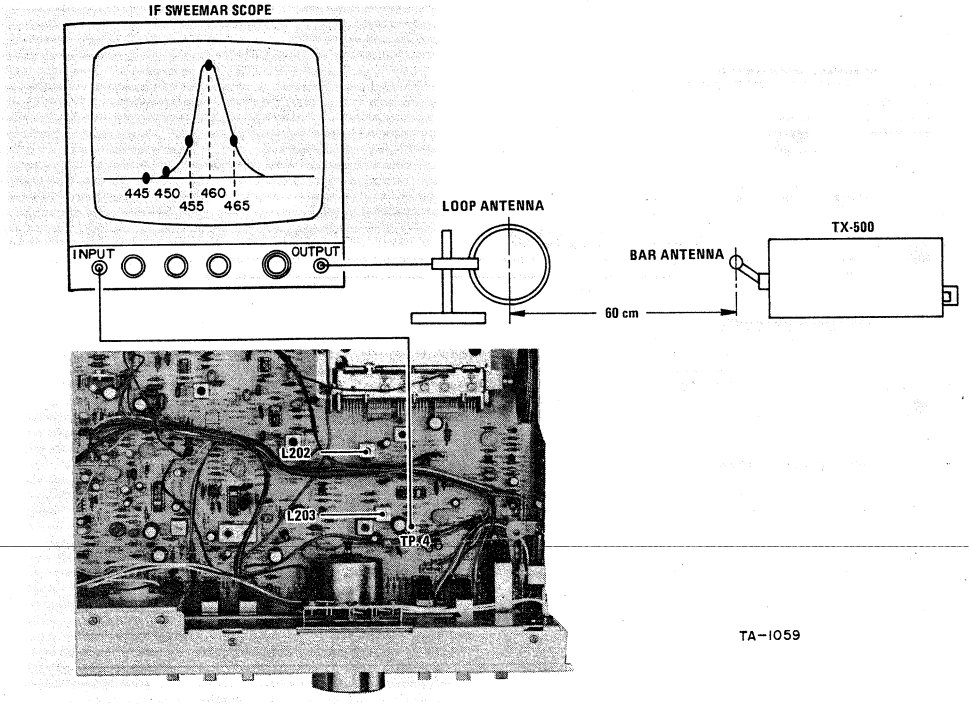

IF SWEEMAR SCOPE
445 450 455 460 465
INPUT
OUTPUT
LOOP ANTENNA
BAR ANTENNA
TX-500
60 cm
L202
L203
TP-4
TA-1059

Fig. 8

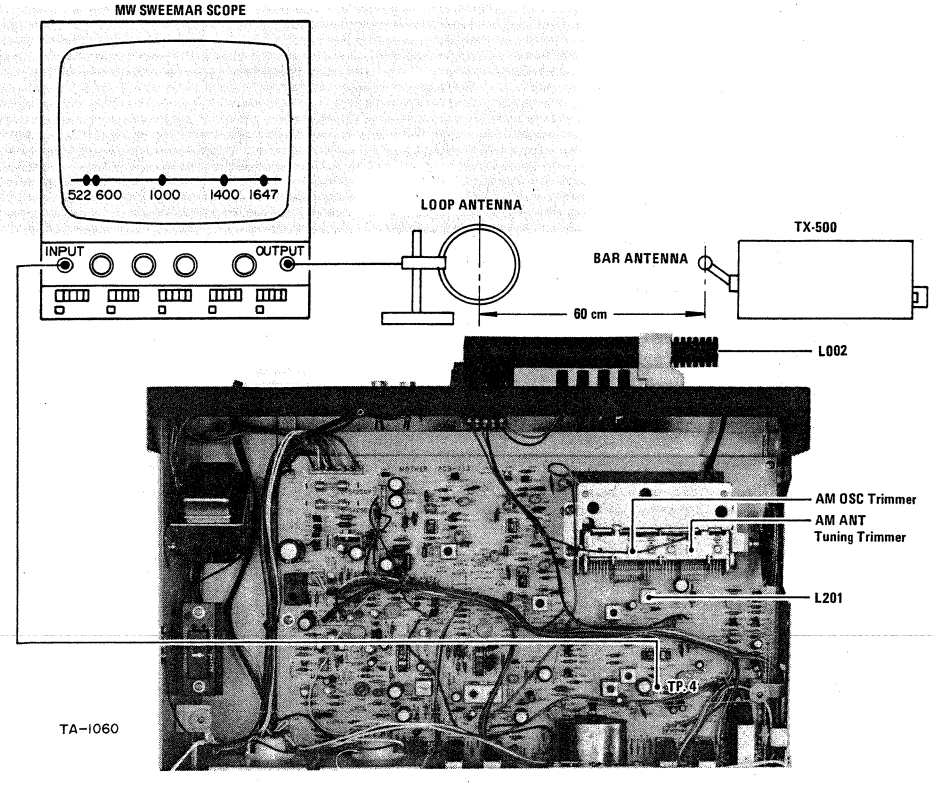

MW SWEEMAR SCOPE
522 600 1000 1400 1647
INPUT
OUTPUT
LOOP ANTENNA
BAR ANTENNA
TX-500
60 cm
L002
AM OSC Trimmer
AM ANT
Tuning Trimmer
L201
TP-4
TA-1060

Fig. 9

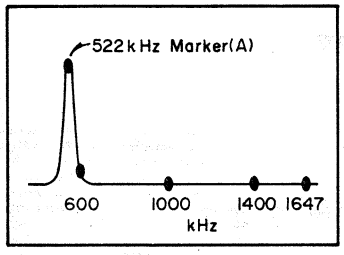


Fig. 10-1

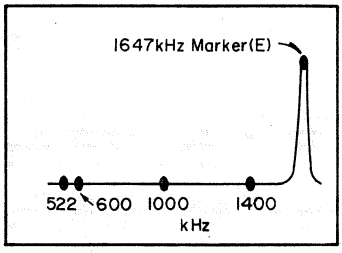


Fig. 10-2

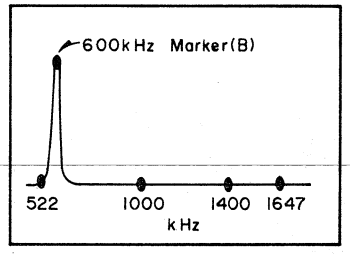


Fig. 10-3

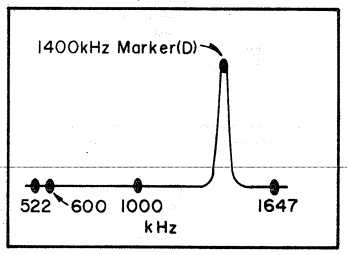


Fig. 10-4

TA-1061

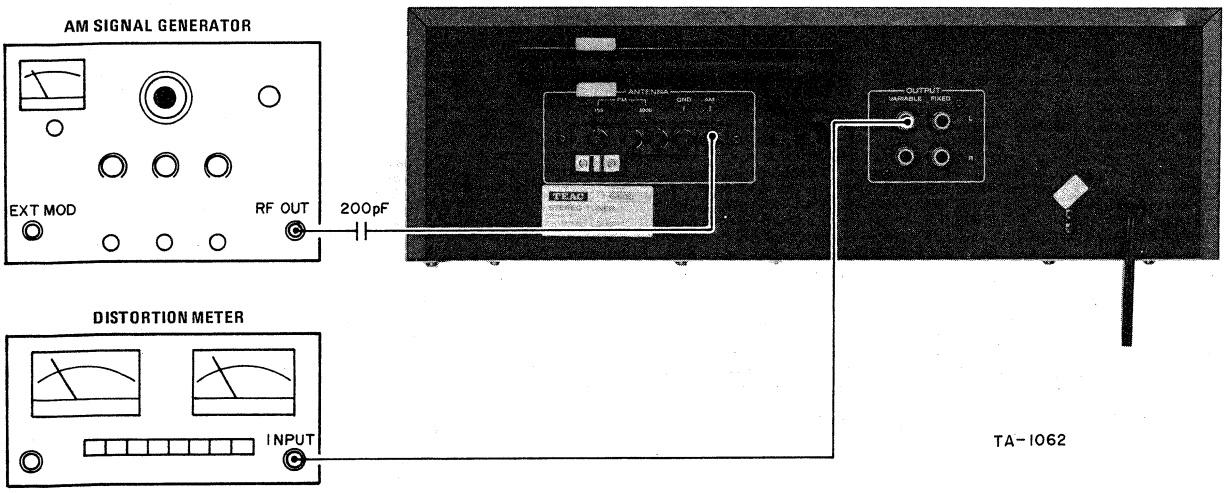
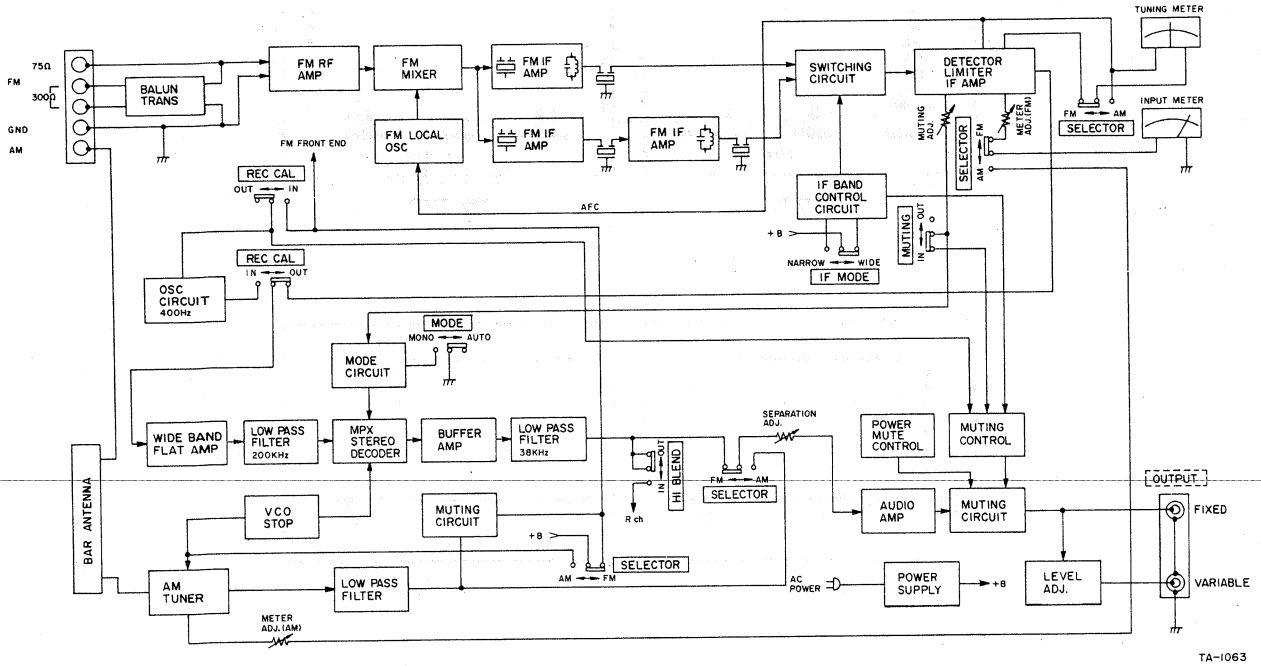


Fig. 11

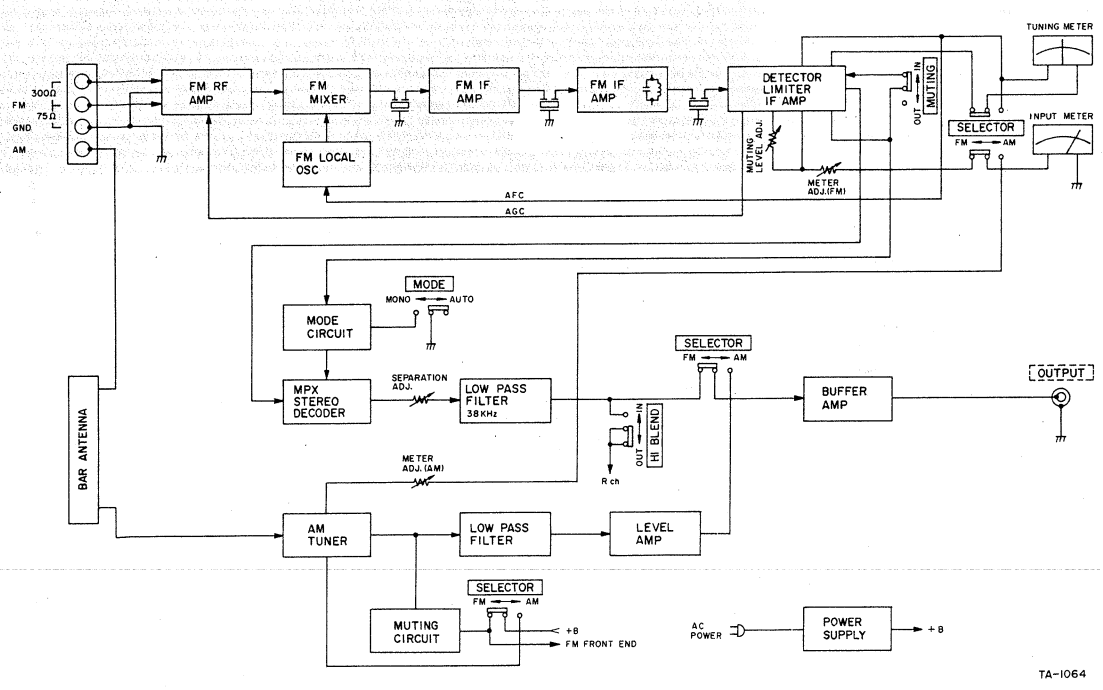
5 BLOCK DIAGRAM

TX-500



TA-1063

TX-300



TA-1064

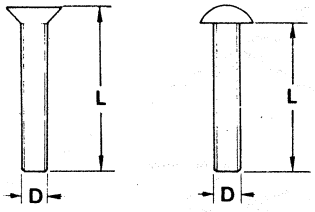
ASSEMBLING HARDWARE CODING LIST

All screws conform to ISO standards, and have crossrecessed heads, unless otherwise noted.
ISO screws have the head inscribed with a point as in the figure to the right.

FOR EXAMPLE:

B M3 x 6

- B — Nomenclature
- M — Metric System
- 3 — Diameter in mm (D) *
- 6 — Length in mm (L)



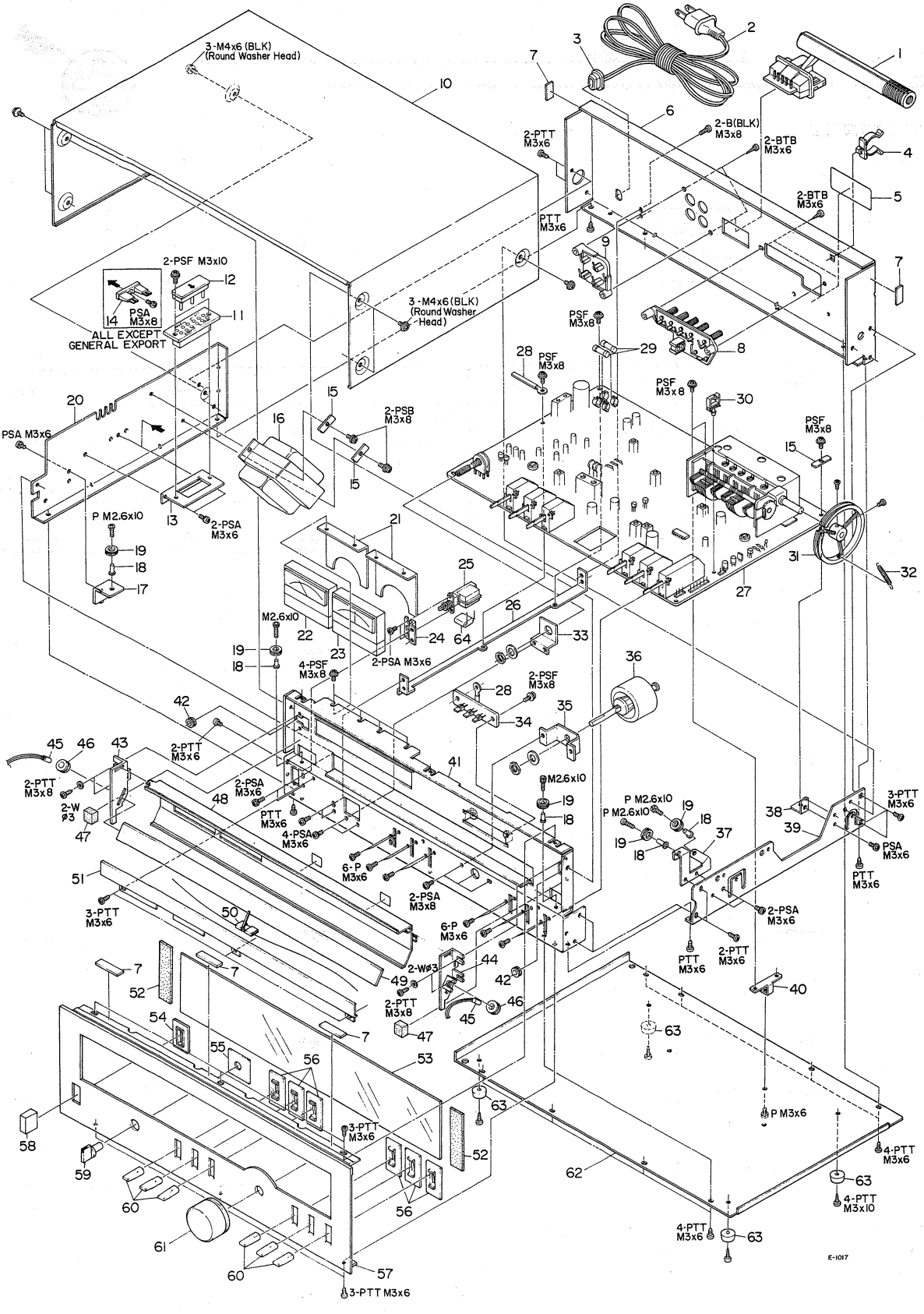
* Inner dia. for washers and nuts

	Code	Name	Type
MACHINE SCREW	R	Round Head Screw	
	P	Pan Head Screw	
	T	Stove Head Screw (Truss)	
	B	Binding Head Screw	
	F	Flat Countersunk Head Screw	
	O	Oval Countersunk Head Screw	
WOOD SCREW	RW	Round Head Wood Screw	
TAPTITE SCREW	PTT	Pan Head Taptite Screw	
	WTT	Washer Head Taptite Screw	
SEMS SCREW	BSA	Binding Head SEMS Screw(A Type)	
	BSB	Binding Head SEMS Screw(B Type)	
	BSF	Binding Head SEMS Screw(F Type)	
	PSA	Pan Head SEMS Screw(A Type)	
	PSB	Pan Head SEMS Screw(B Type)	

	Code	Name	Type
TAPPING SCREW	BTA	Binding Head Tapping Screw(A Type)	
	BTB	Binding Head Tapping Screw(B Type)	
	RTA	Round Head Tapping Screw(A Type)	
	RTB	Round Head Tapping Screw(B Type)	
SETSCREW	SF	Hex Socket Setscrew(Flat Point)	
	SC	Hex Socket Setscrew(Cup Point)	
	SS	Slotted Socket Setscrew(Flat Point)	
WASHER	E	E-Ring (Retaining Washer)	
	W	Flat Washer (Plain)	
	SW	Lock Washer (Spring)	
	LWI	Lock Washer (Internal Teeth)	
	LWE	Lock Washer (External Teeth)	
	TW	Trim Washer (Countersunk)	
NUT	N	Hex Nut	

6 EXPLODED VIEWS AND PARTS LIST

EXPLODED VIEW (TX-500)

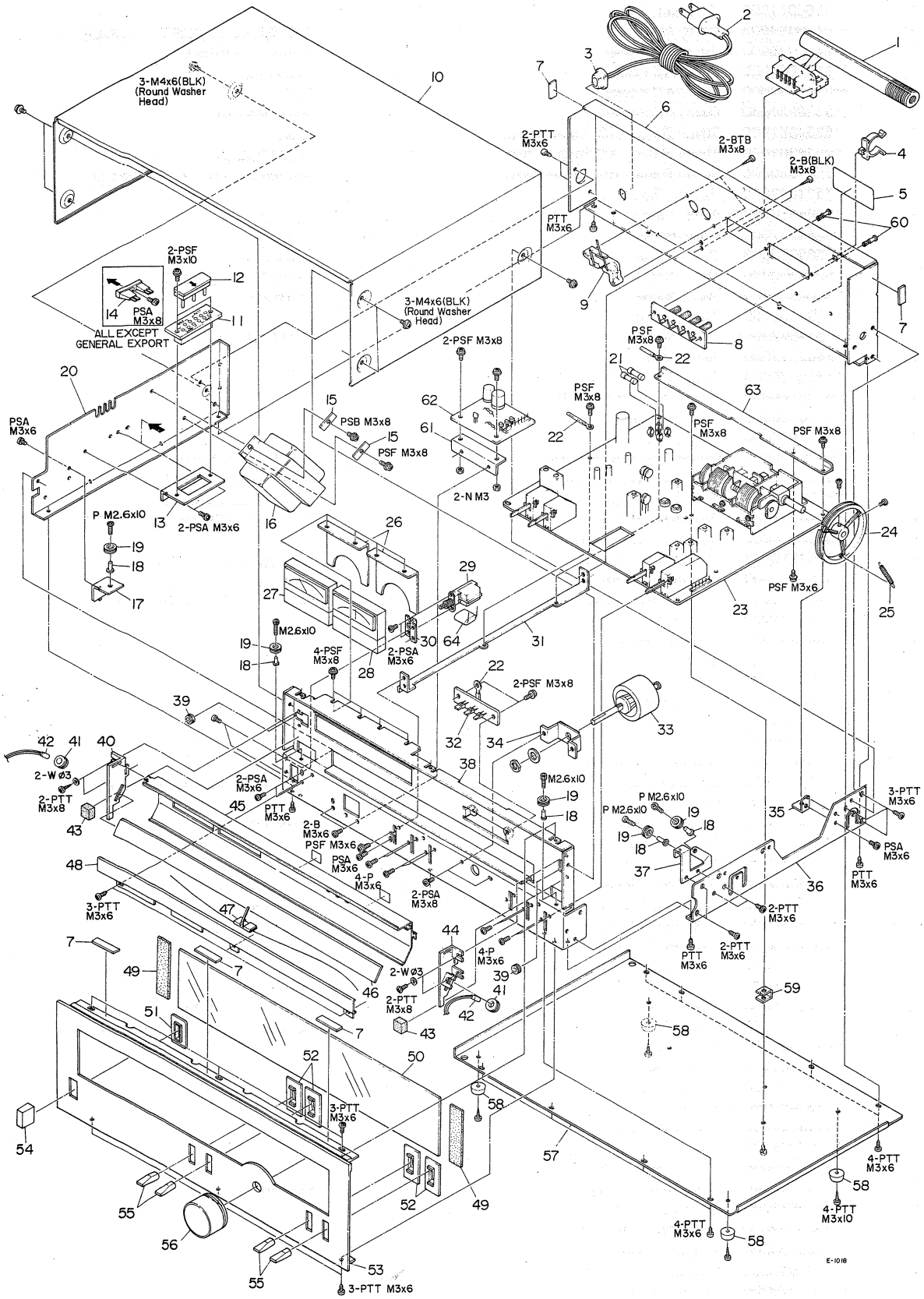


Parts marked with *require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1	5160051000	Antenna, Bar	
2	⚠ 5128034000	Cord, AC Power	GENERAL EXPORT, JAPAN
	⚠ 5128075000	Cord, AC Power	U.S.A., CANADA
	⚠*5128018000	Cord, AC Power	EUROPE
	⚠*5128047000	Cord, AC Power	U.K.
	⚠*5128031000	Cord, AC Power	AUSTRALIA
3	*5534661000	Strain Relief, AC Power Cord	U.K.
	*5534663000	Strain Relief, AC Power Cord	AUSTRALIA
	*5534660000	Strain Relief, AC Power Cord	All except U.K., AUSTRALIA
4	*5534847000	Holder, Rod	
5	*5564656000	Plate, Name	JAPAN
	*5564657000	Plate, Name	U.S.A.
	*5564658000	Plate, Name	CANADA
	*5564659000	Plate, Name	GENERAL EXPORT
	*5564660000	Plate, Name	EUROPE
	*5564661000	Plate, Name	U.K.
	*5564662000	Plate, Name	AUSTRALIA
6	*5502259000	Panel, Rear	
7	*5555570000	Cushion, Top Cover; B	
8	*5122398000	Terminal, Antenna; 5P	
9	5128105000	Jack Assy; 4P	
10	*5552438000	Cover, Top	
11	*5133015000	Socket, Voltage Selector	GENERAL EXPORT
12	*5133014000	Plug, Voltage Selector	GENERAL EXPORT
13	*5555726000	Bracket, Voltage Selector	GENERAL EXPORT
14	5043835000	Terminal; 2P	All except GENERAL EXPORT
15	*5555626000	Washer, Transformer	
16	⚠ 5152218000	Transformer, Power	JAPAN, U.S.A., CANADA
	⚠ 5152217000	Transformer, Power	GENERAL EXPORT
	⚠ 5152216000	Transformer, Power	EUROPE, U.K., AUSTRALIA
17	*5555834000	Bracket, Pulley; B	
18	*5555845000	Bushing, Metal	
19	*5534803000	Pulley	
20	*5552475000	Chassis, Left Side	
21	*5555831000	Bracket, Meter	
22	5165064000	Meter, Input	
23	5165065000	Merer, Tuning	
24	*5555840001	Bracket, Power Switch	
25	⚠ 5134111000	Switch, Power	JAPAN, GENERAL EXPORT
	⚠ 5134112000	Switch, Power	U.S.A., CANADA
	⚠ 5134125000	Switch, Power	EUROPE, U.K., AUSTRALIA
26	*5553347000	Bracket, PCB; A	
27	*5158035000	PCB Assy, Mother	JAPAN
	*5158058000	PCB Assy, Mother	U.S.A., CANADA
	*5158059000	PCB Assy, Mother	EUROPE, U.K., AUSTRALIA
	*5158132000	PCB Assy, Mother	GENERAL EXPORT
28	*5581038000	Clamper, Cord; A	
29	⚠*5041113000	Fuse; 0.5A 250V	JAPAN
	⚠*5041146000	Fuse; 0.5A 250V	U.S.A., CANADA
	⚠*5142224000	Fuse; 0.5A 250V	GENERAL EXPORT
	⚠*5141154000	Fuse; 0.5A 250V	EUROPE, U.K., AUSTRALIA
30	*5534865000	Clamper, Cord	
31	*5534802000	Pully, Dial	
32	*5524264000	Spring, Dial	
33	*5555880000	Bracket, Volume	
34	*5158034000	PCB Assy, LED	
	*5157034000	PCB, LED	
	5143139000	LED, Green (D301, D302)	SLB-26GG1
	5143140000	LED, Red (D303)	SLB-26UR1
35	*5555832000	Bracket, Flywheel	
36	*5504794000	Flywheel Assy	
37	*5555833000	Bracket, Pulley; A	
38	*5555835000	Bracket, PCB; B	
39	*5553348000	Chassis, Right Side; A	

(Continued on page 30)

EXPLODED VIEW (TX-300)



The indication, TX-300B of remark column shows black-type front panel.

Parts marked with *require longer delivery time than regular parts.

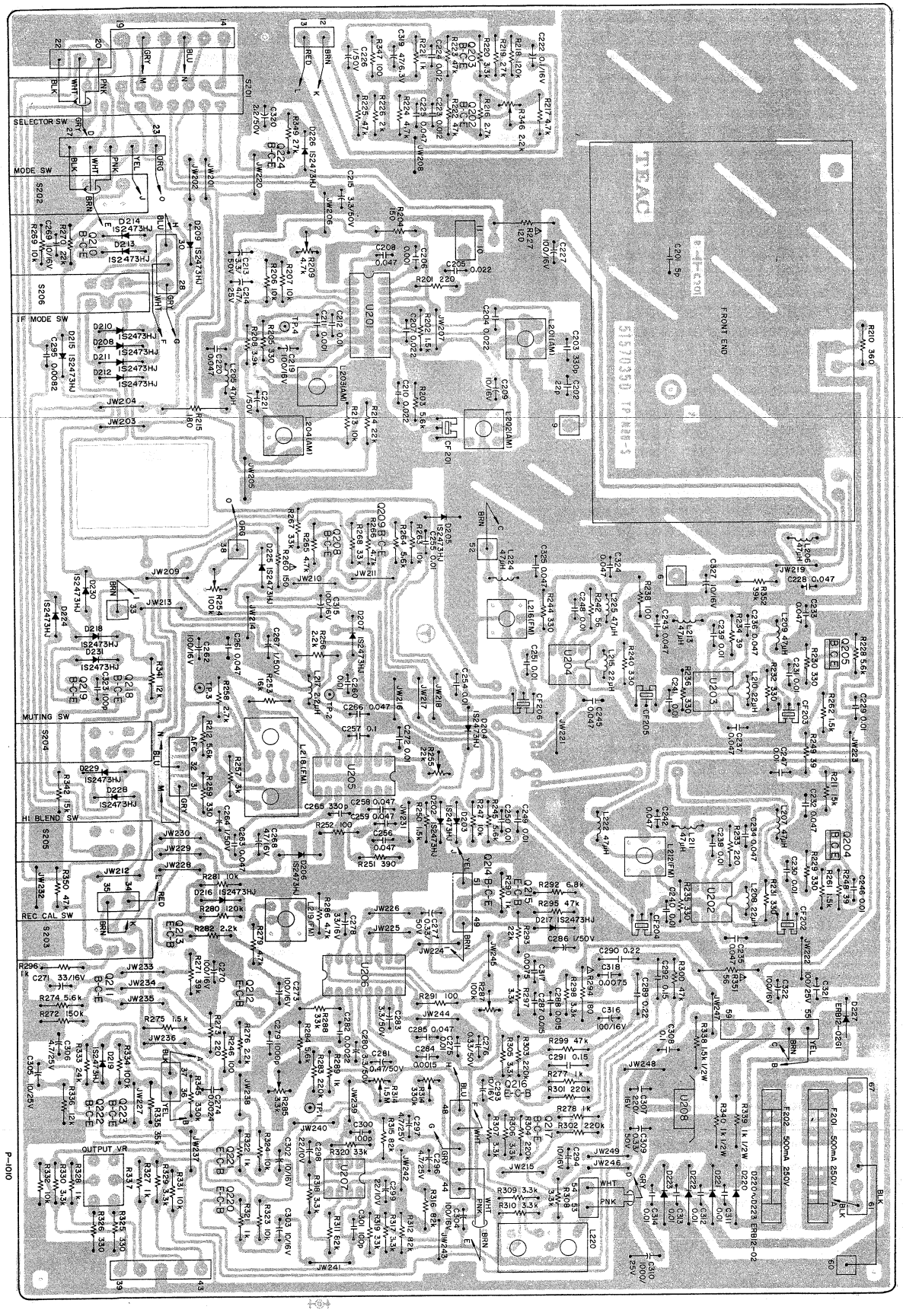
REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1	⚠ 5160051000	Antenna, Bar	
2	⚠ 5128034000	Cord, AC Power	GENERAL EXPORT, JAPAN
	⚠ 5128075000	Cord, AC Power	U.S.A., CANADA
	⚠*5128018000	Cord, AC Power	EUROPE
	⚠*5128047000	Cord, AC Power	U.K.
	⚠*5128031000	Cord, AC Power	AUSTRALIA
3	*5534661000	Strain Relief, AC Power Cord	U.K.
	*5534663000	Strain Relief, AC Power Cord	AUSTRALIA
	*5534660000	Strain Relief, AC Power Cord	All except U.K., AUSTRALIA
4	*5534847000	Holder, Rod	
5	*5564649000	Plate, Name	JAPAN
	*5564650000	Plate, Name	U.S.A.
	*5720002500	Plate, Name	U.S.A. (TX-300B)
	*5564651000	Plate, Name	CANADA
	*5720002700	Plate, Name	CANADA (TX-300B)
	*5564652000	Plate, Name	GENERAL EXPORT
	*5720002600	Plate, Name	GENERAL EXPORT (TX-300B)
	*5564653000	Plate, Name	EUROPE
	*5720002800	Plate, Name	EUROPE (TX-300B)
	*5564654000	Plate, Name	U.K.
	*5720002900	Plate, Name	U.K. (TX-300B)
	*5564655000	Plate, Name	AUSTRALIA
	*5720003000	Plate, Name	AUSTRALIA (TX-300B)
6	*5502258000	Panel, Rear	
7	*5555570000	Cushion, Top Cover; B	
8	*5122435000	Terminal, Antenna; 4P	
9	5128104000	Jack Assy; 2P	
10	*5552438000	Cover, Top	
11	*5133015000	Socket, Voltage Selector	GENERAL EXPORT
12	*5133014000	Plug, Voltage Selector	GENERAL EXPORT
13	*5555726000	Bracket, Voltage Selector	GENERAL EXPORT
14	5043835000	Terminal; 2P	All except GENERAL EXPORT
15	*5555626000	Washer, Transformer	
16	⚠ 5152218000	Transformer, Power	JAPAN, U.S.A., CANADA
	⚠ 5152217000	Transformer, Power	GENERAL EXPORT
	⚠ 5152216000	Transformer, Power	EUROPE, U.K., AUSTRALIA
17	*5555834000	Bracket, Pulley; B	
18	*5555845000	Bushing, Metal	
19	*5534803000	Pulley	
20	*5552475000	Chassis, Left Side	
21	⚠*5041113000	Fuse; 0.5A 250V	JAPAN
	⚠*5041146000	Fuse; 0.5A 250V	U.S.A., CANADA
	⚠*5142224000	Fuse; 0.5A 250V	GENERAL EXPORT
	⚠*5141154000	Fuse; 0.5A 250V	EUROPE, U.K., AUSTRALIA
22	*5581038000	Clamper, Cord; A	
23	*5158033000	PCB Assy, Mother	JAPAN
	*5158056000	PCB Assy, Mother	U.S.A., CANADA
	*5158057000	PCB Assy, Mother	EUROPE, U.K., AUSTRALIA
	*5158131000	PCB Assy, Mother	GENERAL EXPORT
24	*5534802000	Pulley, Dial	
25	*5524264000	Spring, Dial	
26	*5555831000	Bracket, Meter	
27	5165064000	Meter, Input	
	5296000300	Meter, Input	TX-300B
28	5165065000	Meter, Tuning	
	5296000400	Meter, Tuning	TX-300B
29	⚠ 5134111000	Switch, Power	JAPAN, GENERAL EXPORT
	⚠ 5134112000	Switch, Power	U.S.A., CANADA
	⚠ 5134125000	Switch, Power	EUROPE, U.K., AUSTRALIA
30	*5555840001	Bracket, Power Switch	
31	*5553347000	Bracket, PCB; A	
32	*5158034000	PCB Assy, LED	
	*5157034000	PCB, LED	

(Continued on page 31)

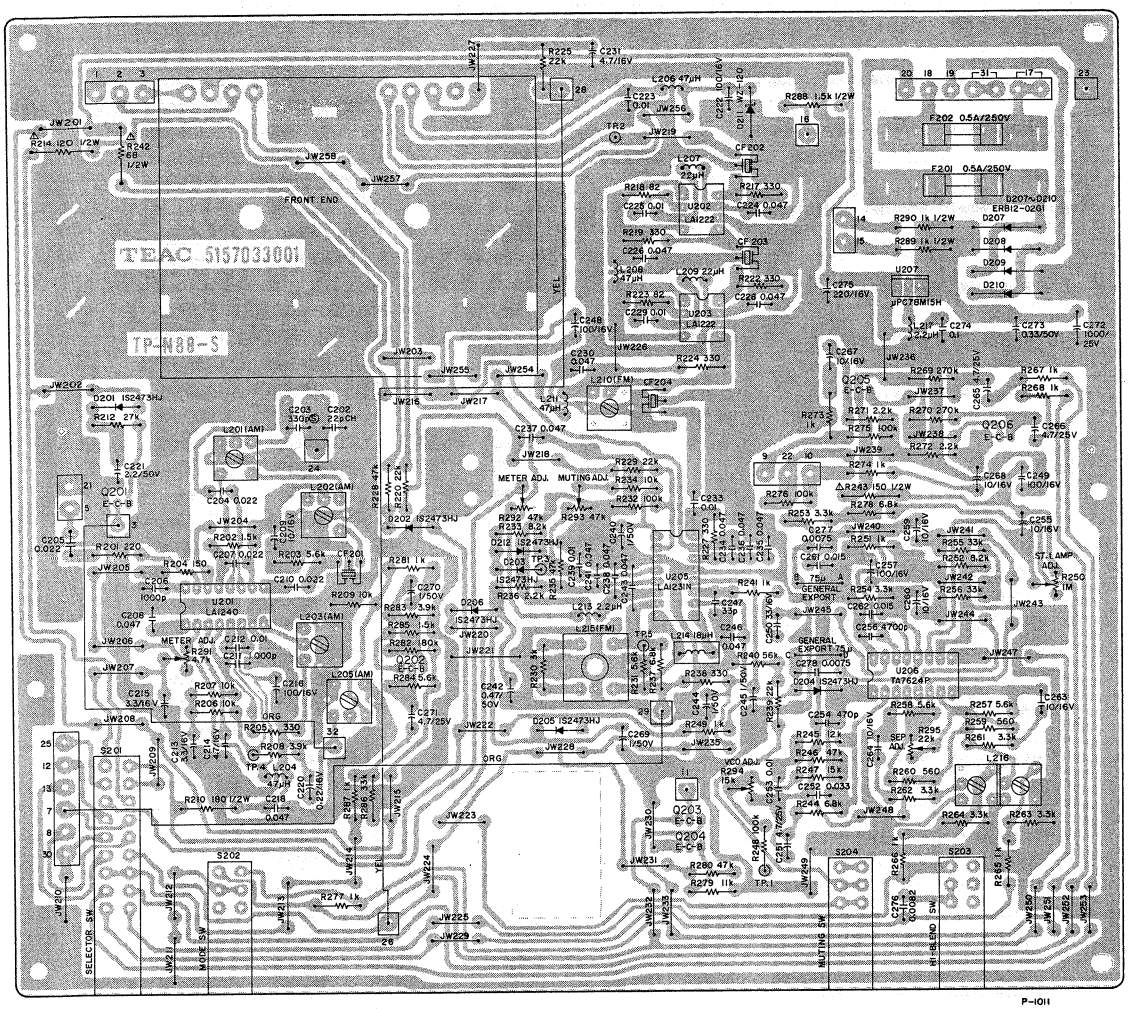
7 PC BOARDS AND PARTS LIST

PC Boards shown viewed from foil side.

MOTHER PCB ASSY (TX-500)

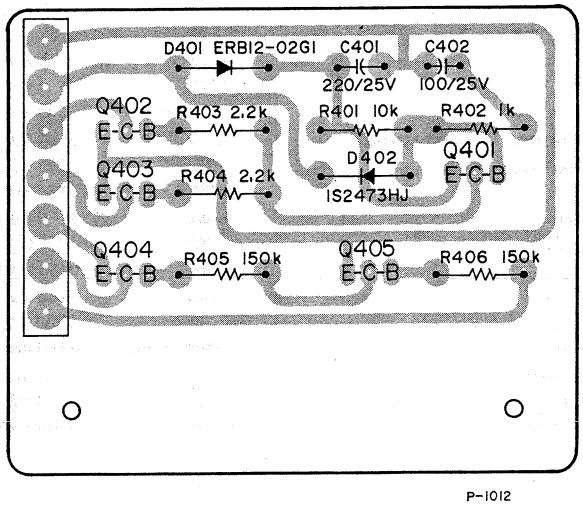


MOTHER PCB ASSY (TX-300)



TX-300

MUTING PCB ASSY (TX-300)



MOTHER PCB ASSY (TX-500)

REF. NO.	PARTS NO.	DESCRIPTION
	5158035000	Mother PCB Assy JAPAN
	5158058000	Mother PCB Assy U.S.A., CANADA
	5158059000	Mother PCB Assy EUROPE, U.K., AUSTRALIA
	5158132000	Mother PCB Assy GENERAL EXPORT
	5157035000	Mother PCB
	5040103000	Front End FR614J JAPAN
	5040102000	Front End FR614U All except JAPAN
	IC's	
U201	5147072000	HA1197
U202～U204	5147063000	LA1222
U205	5147073000	HA11225
U206	5147075000	HA11223W
U207	5147064000	NJM4559D-D
U208	⚠5147069000	μPC78M15H
	TRANSISTORS	
Q202, Q203	5145151000	2SC1815GR
Q204, Q205	5145189000	2SC460©
Q208, Q209	5145151000	2SC1815GR
Q210	5145150000	2SA1015GR
Q211	5145149000	2SA970GR
Q212	5145153000	2SC2240GR
Q213～Q215	5145151000	2SC1815GR
Q216, Q217	5145153000	2SC2240GR
Q218	5145151000	2SC1815GR
Q219	5145150000	2SA1015GR
Q220～Q222	5145151000	2SC1815GR
Q223	5145150000	2SA1015GR
Q224	5145151000	2SC1815GR
	DIODES	
D202～D219	5143118000	1S2473HJ
D220～D223	⚠5143240000	ERB12-02
D224～D226	5143118000	1S2473HJ
D227	5143243000	ERB12-02G1
D228～D231	5143118000	1S2473HJ
	RESISTORS	
	All resistors are rated ±5% tolerance, ¼ watt and of carbon type unless otherwise noted.	
R201	5181466000	220 ohm
R202	5181486000	1.5 k ohm
R203	5181500000	5.6 k ohm
R204	5181462000	150 ohm
R205	5181470000	330 ohm
R206, R207	5181506000	10 k ohm
R208	5181496000	3.9 k ohm
R210	5181471000	360 ohm
R211	5181510000	15 k ohm

REF. NO.	PARTS NO.	DESCRIPTION
R212	5181500000	5.6 k ohm
R213	5181506000	10 k ohm
R214	5181514000	22 k ohm
R215	⚠5185694000	180 ohm ½W Non Flammable
R216	5181492000	2.7 k ohm
R217	5181498000	4.7 k ohm
R218	5181532000	120 k ohm
R219	5181516000	27 k ohm
R220	5181494000	3.3 k ohm
R221	5181482000	1 k ohm
R222, R223	5181522000	47 k ohm
R224	5181498000	4.7 k ohm
R225	5181522000	47 k ohm
R226	5181489000	2 k ohm
R227	⚠5185694000	180 ohm ½W Non Flammable
R228	5181500000	5.6 k ohm
R229～R232	5181470000	330 ohm
R233	5181466000	220 ohm
R234	5181448000	39 ohm
R235, R236	5181470000	330 ohm
R238	5181458000	100 ohm
R240	5181470000	330 ohm
R242	5181452000	56 ohm
R244	5181470000	330 ohm
R245	5181500000	5.6 k ohm
R246	5181458000	100 ohm
R247	5181506000	10 k ohm
R248, R249	5181448000	39 ohm
R250	5181486000	1.5 k ohm
R251	5181472000	390 ohm
R252	5181530000	100 k ohm
R253	5185551000	16 k ohm Metal Film
R256	5181490000	2.2 k ohm
R257	5185533000	3 k ohm Metal Film
R258	5181492000	2.7 k ohm
R259	5181470000	330 ohm
R260	⚠5185692000	150 ohm ½W Non Flammable
R261, R262	5181486000	1.5 k ohm
R263	5181506000	10 k ohm
R264	5181500000	5.6 k ohm
R265, R266	5181498000	4.7 k ohm
R267, R268	5181518000	33 k ohm
R269	5181506000	10 k ohm
R270	5181514000	22 k ohm
R271	5181520000	39 k ohm
R272	5181534000	150 k ohm
R273	5181466000	220 ohm
R274	5181500000	5.6 k ohm
R275	5181486000	1.5 k ohm
R276	5181490000	2.2 k ohm
R277, R278	5181482000	1 k ohm
R279	5181498000	4.7 k ohm
R280	5181532000	120 k ohm
R281	5181506000	10 k ohm
R282	5181490000	2.2 k ohm
R283	5181538000	220 k ohm
R284	5185540000	5.6 k ohm Metal Film
R286	5181498000	4.7 k ohm
R288	5181518000	33 k ohm
R289, R290	5181482000	1 k ohm
R291	5181458000	100 ohm
R292	5181502000	6.8 k ohm
R293	5181514000	22 k ohm

REF. NO.	PARTS NO.	DESCRIPTION		
R294	⚠5185694000	180 ohm	½W	Non Flammable
R295	5181522000	47 k ohm		
R296	5181482000	1 k ohm		
R297, R298	5185534000	3.3 k ohm	Metal Film	
R299, R300	5181522000	47 k ohm		
R301 ~ R304	5181538000	220 k ohm		
R305 ~ R310	5181494000	3.3 k ohm		
R311, R312	5181528000	82 k ohm		
R315, R316	5181528000	82 k ohm		
R317, R318	5181494000	3.3 k ohm		
R319, R320	5181518000	33 k ohm		
R321, R322	5181482000	1 k ohm		
R323, R324	5181506000	10 k ohm		
R325, R326	5181470000	330 ohm		
R327, R328	5181482000	1 k ohm		
R329, R330	5181494000	3.3 k ohm		
R331, R332	5181506000	10 k ohm		
R333	5181515000	24 k ohm		
R334	5181530000	100 k ohm		
R335	5181518000	33 k ohm		
R336	5181508000	12 k ohm		
R338	5180086000	1.5 k ohm	½W	
R339, R340	5180082000	1 k ohm	½W	
R341	5181508000	12 k ohm		
R342	5181510000	15 k ohm		
R345	5181542000	330 k ohm		
R347	5181458000	100 ohm		
R349	5181516000	27 k ohm		
R350	5181522000	47 k ohm		
R351	⚠5185682000	56 ohm	½W	Non Flammable
R352	5181520000	39 k ohm		

CAPACITORS

C201	5173440000	Ceramic	5 pfd	
C202	5173449000	Ceramic	22 pfd	
C203	5172552000	Polyst.	330 pfd	50V
C204, C205	5173434000	Ceramic	0.022 mfd	
C206	5173430000	Ceramic	0.001 mfd	
C207	5173434000	Ceramic	0.022 mfd	
C208	5173435000	Ceramic	0.047 mfd	
C209	5173141000	Elec.	10 mfd	16V
C210	5173434000	Ceramic	0.022 mfd	
C211	5173430000	Ceramic	0.001 mfd	
C212	5173433000	Ceramic	0.01 mfd	
C213	5173121000	Elec.	3.3 mfd	50V
C214	5173129000	Elec.	4.7 mfd	25V
C215	5173121000	Elec.	3.3 mfd	50V
C219	5173195000	Elec.	100 mfd	16V
C220	5173435000	Ceramic	0.047 mfd	
C221	5173105000	Elec.	1 mfd	50V
C222	5054695000	Tant.	0.1 mfd	16V
C223, C224	5173383000	Mylar	0.012 mfd	50V
C225	5173389000	Mylar	0.047 mfd	50V
C226	5173105000	Elec.	1 mfd	50V
C227	5173195000	Elec.	100 mfd	16V
C228	5173435000	Ceramic	0.047 mfd	
C229 ~ C231	5173433000	Ceramic	0.01 mfd	
C232 ~ C237	5173435000	Ceramic	0.047 mfd	
C238 ~ C241	5173433000	Ceramic	0.01 mfd	
C242, C243	5173435000	Ceramic	0.047 mfd	
C245	5173435000	Ceramic	0.047 mfd	
C246 ~ C251	5173433000	Ceramic	0.01 mfd	

REF. NO.	PARTS NO.	DESCRIPTION		
C254, C255	5173433000	Ceramic	0.01 mfd	
C256	5173435000	Ceramic	0.047 mfd	
C257	5171878000	Mylar	0.1 mfd	100V
C258, C259	5173435000	Ceramic	0.047 mfd	
C260	5173433000	Ceramic	0.01 mfd	
C261	5173435000	Ceramic	0.047 mfd	
C262	5173194000	Elec.	100 mfd	16V
C263	5173435000	Ceramic	0.047 mfd	
C264	5173105000	Elec.	1 mfd	50V
C265	5172218000	Ceramic	330 pfd	
C266	5173435000	Ceramic	0.047 mfd	
C267	5173105000	Elec.	1 mfd	50V
C268	5173182000	Elec.	47 mfd	16V
C269	5173140000	Elec.	10 mfd	16V
C270	5173194000	Elec.	100 mfd	16V
C271	5173168000	Elec.	33 mfd	16V
C272	5173433000	Ceramic	0.01 mfd	
C273	5173194000	Elec.	100 mfd	16V
C274	5170361000	Mylar	0.0024 mfd	100V
C275	5171856000	Mylar	0.01 mfd	100V
C276, C277	5170095000	Elec.	0.33 mfd	50V (LR)
C278	5173168000	Elec.	33 mfd	16V
C279	5172564000	Polyst.	1000 pfd	50V
C280	5173120000	Elec.	3.3 mfd	50V
C281	5170085000	Elec.	0.47 mfd	50V (LR)
C282	5170360000	Mylar	0.0022 mfd	100V
C283	5173120000	Elec.	3.3 mfd	50V
C284	5170356000	Mylar	0.0015 mfd	100V
C285	5171872000	Mylar	0.047 mfd	100V
C286	5173105000	Elec.	1 mfd	50V
C287, C288	5173386000	Mylar	0.022 mfd	50V
			U.S.A., CANADA	
C287, C288	5173384000	Myalr	0.015 mfd	50V
			All except U.S.A., CANADA	
C289, C290	5173797000	Mylar	0.22 mfd	100V
C291, C292	5173796000	Myalr	0.15 mfd	100V
C293, C294	5170077000	Elec.	10 mfd	16V (LR)
C295	5170374000	Mylar	0.0082 mfd	100V
C296, C297	5170081000	Elec.	4.7 mfd	25V (LR)
C298, C299	5173155000	Elec.	22 mfd	10V
C300, C301	5172312000	Ceramic	100 pfd	
C302, C303	5170077000	Elec.	10 mfd	16V (LR)
C304	5173195000	Elec.	100 mfd	16V
C305	5173143000	Elec.	10 mfd	25V
C306	5173129000	Elec.	4.7 mfd	25V
C307	5173054000	Elec.	220 mfd	16V
C308	5171878000	Mylar	0.1 mfd	100V
C309	5170095000	Elec.	0.33 mfd	50V (LR)
C310	5173082000	Elec.	1000 mfd	25V
C311 ~ C314	5173433000	Ceramic	0.01 mfd	
C315, C316	5173194000	Elec.	100 mfd	16V
C317, C318	5170373000	Mylar	0.0075 mfd	100V
			GENERAL EXPORT	
C319	5173179000	Elec.	47 mfd	6.3V
C320	5173112000	Elec.	2.2 mfd	50V
C321	5173196000	Elec.	100 mfd	25V
C322	5173194000	Elec.	100 mfd	16V
C323	5172600000	Polyst.	100 pfd	50V
C234, C235	5173435000	Ceramic	0.047 mfd	
C327	5173140000	Elec.	10 mfd	16V

REF. NO.	PARTS NO.	DESCRIPTION		
	VARIABLE RESISTORS			
R209	5053346000	Semi-fixed	4.7 k ohm	
R254	5053349000	Semi-fixed	100 k ohm	
R255	5053356000	Semi-fixed	22 k ohm	
R285	5053920000	Semi-fixed	3.3 k ohm	
R287	5053349000	Semi-fixed	100 k ohm	
R313	5053367000	Semi-fixed	330 k ohm	
R314	5053436000	Semi-fixed	1.5 M ohm	
R337	5150252000	Volume	10 k ohm	(3B) x 2
R346	5053364000	Semi-fixed	2.2 k ohm	
	COILS			
L201	5160057000	AM	OSC	
L202	5160065000	AM	IF	
L203	5160056000	AM	RF	
L204	5160052000	AM	9 kHz	LPF
L205～L207	5160130000	Choke	47 μH	
L208	5160126000	Choke	22 μH	
L209	5160130000	Choke	47 μH	
L210	5160126000	Choke	22 μH	
L211	5160130000	Choke	47 μH	
L212	5160055000	FM	IF	
L213	5160130000	Choke	47 μH	
L215	5160126000	Choke	22 μH	
L216	5160055000	FM	IF	
L217	5160114000	Choke	2.2 μH	
L218	5160059000	FM	DET	
L219	5160053000	FM	200 kHz	LPF
L220	5160064000	FM	38 kHz	LPF
L222	5160130000	Choke	47 μH	
L224, L225	5160130000	Choke	47 μH	

REF. NO.	PARTS NO.	DESCRIPTION		
	CERAMIC FILTERS			
CF201	5189003000	AM		JAPAN, U.S.A., CANADA
CF201	5189002000	AM		All except JAPAN, U.S.A., CANADA
CF202	5189006000	FM		
CF203～CF206	5189005000	FM		
	FUSES			
F201, F202	⚠5041113000	0.5A	250V	JAPAN
F201, F202	⚠5041146000	0.5A	250V	U.S.A., CANADA
F201, F202	⚠5142224000	0.5A	250V	GENERAL EXPORT
F201, F202	⚠5141154000	0.5A	250V	EUROPE, U.K., AUSTRALIA
	MISCELLANEOUS			
S201	5132052000	Switch, Lever		
S202～S205	5132051000	Switch, Lever		
S206	5132053000	Switch, Lever		
TP1～TP4	5544750000	*Combination T.P.*		
	5122423000	Lapping Terminal		WD-1
	5122424000	Lapping Terminal		WD-2
	5122425000	Lapping Terminal		WD-3
	5122427000	Lapping Terminal		WD-5
	5122478000	Lapping Terminal		WD-6
	5122479000	Lapping Terminal		WD-7
	5041237000	Holder, Fuse		JAPAN, U.S.A., CANADA
	5142087000	Holder, Fuse		All except Japan, U.S.A., CANADA

MOTHER PCB ASSY (TX-300)

REF. NO.	PARTS NO.	DESCRIPTION
	5158033001	Mother PCB Assy JAPAN
	5158056001	Mother PCB Assy U.S.A., CANADA
	5158057001	Mother PCB Assy EUROPE, U.K., AUSTRALIA
	5158131001	Mother PCB Assy GENERAL EXPORT
	5157033001	Mother PCB
	5040105000	Front end FF 222J JAPAN
	5040104000	Front end FF 222U All except JAPAN
		IC's
U201	5147067000	LA1240
U202, U203	5147063000	LA1222
U205	5147068000	LA1231N
U206	5147071000	TA7624P
U207	⚠5147069000	μPC78M15H
		TRANSISTORS
Q201	5145151000	2SC1815GR
Q202	5145153000	2SC2240GR
Q203, Q204	5145151000	2SC1815GR
Q205, Q206	5145153000	2SC2240GR
		DIODES
D201～D206	5143118000	1S2473HJ
D207～D210	⚠5143240000	ERB12-02G1
D211	5042281000	WZ-120
D212	5143118000	1S2473HJ
		RESISTORS
		All resistors are rated ±5% tolerance, ¼ watt and of carbon type unless otherwise noted.
R201	5181466000	220 ohm
R202	5181486000	1.5 k ohm
R203	5181500000	5.6 k ohm
R204	5181462000	150 ohm
R205	5181470000	330 ohm
R206, R207	5181506000	10 k ohm
R208	5181496000	3.9 k ohm
R209	5181506000	10 k ohm
R210	⚠5185694000	180 ohm ½W Non Flammable
R212	5181516000	27 k ohm
R214	⚠5185690000	120 ohm ½W Non Flammable
R217	5181470000	330 ohm
R218	5181448000	39 ohm
R219	5181470000	330 ohm
R220	5181514000	22 k ohm
R222	5181470000	330 ohm
R223	5181450000	47 ohm
R224	5181470000	330 ohm
R225	5181514000	22 k ohm
R227	5181470000	330 ohm

REF. NO.	PARTS NO.	DESCRIPTION
R228	5181522000	47 k ohm
R229	5181514000	22 k ohm
R230	5185533000	3 k ohm Metal Film
R231	5185540000	5.6 k ohm Metal Film
R232	5181530000	100 k ohm
R233	5181504000	8.2 k ohm
R234	5181506000	10 k ohm
R235	5181522000	47 k ohm
R236	5181490000	2.2 k ohm
R237	5181502000	6.8 k ohm
R238	5181470000	330 ohm
R239	5181514000	22 k ohm
R240	5181524000	56 k ohm
R241	5181482000	1 k ohm
R242	⚠5185684000	68 ohm ½W Non Flammable
R243	⚠5185692000	150 ohm ½W Non Flammable
R244	5181502000	6.8 k ohm
R245	5181508000	12 k ohm
R246	5181522000	47 k ohm
R247	5185550000	15 k ohm Metal Film
R248	5181530000	100 k ohm
R249	5181482000	1 k ohm
R251	5181482000	1 k ohm
R252	5181504000	8.2 k ohm
R253, R254	5185534000	3.3 k ohm Metal Film
R255, R256	5181518000	33 k ohm
R257, R258	5181500000	5.6 k ohm
R259, R260	5181476000	560 ohm
R261, R262	5181494000	3.3 k ohm
R263, R264	5181494000	3.3 k ohm
R265～R268	5181482000	1 k ohm
R269, R270	5181540000	270 k ohm
R271, R272	5181490000	2.2 k ohm
R273, R274	5181482000	1 k ohm
R275, R276	5181530000	100 k ohm
R277	5181482000	1 k ohm
R278	5181502000	6.8 k ohm
R279	5181507000	11 k ohm
R280	5181522000	47 k ohm
R281	5181482000	1 k ohm
R282	5181536000	180 k ohm
R283	5181520000	39 k ohm
R284	5181500000	5.6 k ohm
R285	5181486000	1.5 k ohm
R286	5181518000	33 k ohm
R287	5181482000	1 k ohm
R288	5180086000	1.5 k ohm ½W
R289, R290	5180082000	1 k ohm ½W
		CAPACITORS
C201	5173440000	Ceramic 5 pfd
C202	5173449000	Ceramic 22 pfd
C203	5172612000	Polyst. 330 pfd 50V
C204, C205	5173434000	Ceramic 0.022 mfd
C206	5173430000	Ceramic 0.001 mfd
C207	5173434000	Ceramic 0.022 mfd
C208	5173435000	Ceramic 0.047 mfd
C209	5173140000	Elec. 10 mfd 16V
C210	5173434000	Ceramic 0.022 mfd
C211	5173430000	Ceramic 0.001 mfd
C212	5173433000	Ceramic 0.01 mfd
C213	5173120000	Elec. 3.3 mfd 50V

REF. NO.	PARTS NO.	DESCRIPTION		
C214	5173128000	Elec.	4.7 mfd	25V
C215	5173120000	Elec.	3.3 mfd	50V
C216	5173194000	Elec.	100 mfd	16V
C218	5173435000	Ceramic	0.047 mfd	
C220	5054697000	Tant.	0.22 mfd	16V
C221	5173112000	Elec.	2.2 mfd	50V
C222	5173194000	Elec.	100 mfd	16V
C223	5173433000	Ceramic	0.01 mfd	
C224	5173435000	Ceramic	0.047 mfd	
C225	5173433000	Ceramic	0.01 mfd	
C226	5173435000	Ceramic	0.047 mfd	
C228	5173435000	Ceramic	0.047 mfd	
C229	5173433000	Ceramic	0.01 mfd	
C230	5173435000	Ceramic	0.047 mfd	
C231	5173128000	Elec.	4.7 mfd	25V
C233	5173433000	Ceramic	0.01 mfd	
C234～C238	5173435000	Ceramic	0.047 mfd	
C239	5173433000	Ceramic	0.01 mfd	
C240	5173104000	Elec.	1 mfd	50V
C241	5173435000	Ceramic	0.047 mfd	
C242	5173100000	Elec.	0.47 mfd	50V
C243	5173435000	Ceramic	0.047 mfd	
C244, C245	5173104000	Elec.	1 mfd	50V
C246	5173435000	Ceramic	0.047 mfd	
C247	5173451000	Ceramic	33 pfd	
C248, C249	5173194000	Elec.	100 mfd	16V
C250	5173168000	Elec.	33 mfd	16V
C251	5173128000	Elec.	4.7 mfd	25V
C252	5171868000	Mylar	0.033 mfd	100V
C253	5171856000	Mylar	0.01 mfd	100V
C254	5172616000	Polyst.	470 pfd	50V
C255	5173140000	Elec.	10 mfd	16V
C256	5172640000	Polyst.	4700 pfd	50V
C257	5173194000	Elec.	100 mfd	16V
C258	5171896000	Mylar	0.047 mfd	50V
C259, C260	5171565000	Elec.	10 mfd	16V (LR)
C261, C262	5171864000	Mylar	0.022 mfd	100V U.S.A., CANADA
C261, C262	5171860000	Mylar	0.015 mfd	100V All except U.S.A., CANADA
C263, C264	5173140000	Elec.	10 mfd	16V
C265, C266	5173128000	Elec.	4.7 mfd	25V
C267, C268	5173140000	Elec.	10 mfd	16V
C269, C270	5173104000	Elec.	1 mfd	50V
C271	5173128000	Elec.	4.7 mfd	25V
C272	5173082000	Elec.	1000 mfd	25V
C273	5170095000	Elec.	0.33 mfd	50V (LR)
C274	5171902000	Mylar	0.1 mfd	100V
C275	5173054000	Elec.	220 mfd	16V
C276	5170398000	Mylar	0.0082 mfd	100V
C277, C278	5170373000	Mylar	0.0075 mfd	100V

VARIABLE RESISTORS

R250	5053355000	Semi-fixed	1 M ohm
R291	5053346000	Semi-fixed	4.7 k ohm
R292, R293	5053352000	Semi-fixed	47 k ohm
R294	5053354000	Semi-fixed	15 k ohm
R295	5053356000	Semi-fixed	22 k ohm

REF. NO.	PARTS NO.	DESCRIPTION		

COILS

L201	5160057000	AM	OSC	
L202	5160065000	AM	IF	
L203	5160056000	AM	RF	
L204	5160130000	Choke	47 μH	
L205	5160052000	AM	9 kHz	LPF
L206	5160130000	Choke	47 μH	
L207	5160126000	Choke	22 μH	
L208	5160130000	Choke	47 μH	
L209	5160126000	Choke	22 μH	
L210	5160055000	FM	IF	
L211	5160130000	Choke	47 μH	
L213	5160114000	Choke	2.2 μH	
L214	5160061000	Choke	18 μH	
L215	5160058000	FM	DET	
L216	5160064000	FM	38 kHz	LPF
L217	5160114000	Choke	2.2 μH	

CERAMIC FILTERS

CF201	5189003000	AM	JAPAN, U.S.A., CANADA
CF201	5189002000	AM	All except JAPAN, U.S.A., CANADA
CF202	5189004000	FM	
CF203, CF204	5189005000	FM	

FUSES

F201, F202	⚠5041113000	0.5A	250V	JAPAN
F201, F202	⚠5041146000	0.5A	250V	U.S.A., CANADA
F201, F202	⚠5142224000	0.5A	250V	GENERAL EXPORT
F201, F202	⚠5041154000	0.5A	250V	EUROPE, U.K., AUSTRALIA

MISCELLANEOUS

S201	5132052000	Switch, lever	
S202～S204	5132051000	Switch, lever	
TP2	5544750000	Combination T.P.	
	5122423000	Lapping Terminal	WD-1
	5122424000	Lapping Terminal	WD-2
	5122425000	Lapping Terminal	WD-3
	5122428000	Lapping Terminal	WD-6
	5122479000	Lapping Terminal	WF-7
	5041237000	Holder, Fuse	JAPAN, U.S.A., CANADA
	5142087000	Holder, Fuse	All except JAPAN, U.S.A., CANADA

MUTING PCB ASSY (TX-300)

REF. NO.	PARTS NO.	DESCRIPTION
	5200001500	Muting PCB Assy
	5210001500	Muting PCB
		TRANSISTORS
Q401	5145150000	2SA1015GR
Q402, Q403	5145151000	2SC1815GR
Q404	5145150000	2SA1015GR
Q405	5145151000	2SC1815GR
		DIODES
D401	5143243000	ERB12-02GI
D402	5143118000	1S2473HJ
		RESISTORS
		All resistors are rated ±5% tolerance, ¼ watt and of carbon type.
R401	5183106000	10 k ohm
R402	5183082000	1 k ohm
R403, R404	5183090000	2.2 k ohm
R405, R406	5183134000	150 k ohm
		CAPACITORS
C401	5172944000	Elec. 220 mfd 25V
C402	5172935000	Elec. 100 mfd 25V
		MISCELLANEOUS
	5122429000	Lapping Terminal WD-7

(Continued from page 19)

Parts marked with *require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
40	*5555836000	Bracket, PCB; C	
41	*5552477001	Frame, Front	
42	*5534804000	Bushing, Rubber	
43	*5533247001	Bracket, Left Side	
44	*5533248001	Bracket, Right Side	
45	5142038000	Lamp, Dial	
46	*5534805000	Bushing, Rubber	
47	*5534868000	Spacer, B	
48	*5552474001	Plate, Back	
49	*5552487001	Dial Scale	JAPAN
	*5552485001	Dial Scale	All except JAPAN
50	*5553346000	Pointer, Dial	
51	*5553345000	Plate, Blind	
52	*5534867000	Spacer, A	
53	*5534799000	Plate, Glass	
54	*5534772000	Escutcheon, Power Switch	
55	*5555847000	Mask, Variable Resistor	
56	*5534780000	Escutcheon, Lever Switch	
57	5502257000	Panel Assy, Front	
58	5534774000	Button, Power Switch	
59	5534729000	Knob, Output Volume	
60	5534779000	Knob, Lever Switch	
61	5555839000	Knob, Tuning	
62	*5552447000	Plate, Bottom	
63	5534432000	Foot	
64	⚠*5052909000	Spark Killer 0.1 mfd + 120 ohm 300V AC	JAPAN
	⚠*5171606000	Spark Killer 0.01 mfd 125V AC	U.S.A.
	⚠*5052916000	Spark Killer 0.01 mfd 125V AC	CANADA
	⚠*5052907000	Spark Killer 0.01 mfd + 300 ohm 400V AC	GENERAL EXPORT
	⚠*5052917000	Spark Killer 0.01 mfd 450V AC	EUROPE, U.K., AUSTRALIA
Included Accessories			
	5101698000	Owner's Manual	JAPAN
	5101699000	Owner's Manual	U.S.A.
	5101700000	Owner's Manual	All except JAPAN, U.S.A.
	*5124064000	Antenna, T Type	
	5350007600	Cord, Output	

(Continued from page 21)

Parts marked with *require longer delivery time than regular parts.

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
32	5143139000	LED, Green (D301, D302)	SLB-26GG1
	5143140000	LED, Red (D303)	SLB-26UR1
33	*5504794000	Flywheel Assy	
34	*5555832000	Bracket, Flywheel	
35	*5555835000	Bracket, PCB; B	
36	*5553348000	Chassis, Right Side; A	
37	*5555833000	Bracket, Pulley; A	
38	*5552477001	Frame, Front	
39	*5534804000	Bushing, Rubber	
40	*5533247001	Bracket, Left Side	
41	*5534805000	Bushing, Rubber	
42	5142038000	Lamp, Dial	
43	*5534868000	Spacer, B	
44	*5533248001	Bracket, Right Side	
45	*5552474001	Plate, Back	
	*5800006860	Plate, Back	TX-300B
46	*5552486001	Dial Scale	JAPAN
	*5552476001	Dial Scale	All except JAPAN
47	*5553346000	Pointer, Dial	
48	*5553345000	Plate, Blind	
	*5800006900	Plate, Blind	TX-300B
49	*5534867000	Spacer, A	
50	*5534799000	Plate, Glass	
51	*5534772000	Escutcheon, Power Switch	
	*5800004800	Escutcheon, Power Switch	TX-300B
52	*5534780000	Escutcheon, Lever Switch	
	*5800007400	Escutcheon, Lever Switch	TX-300B
53	5502256000	Panel Assy, Front	
	5800006700	Panal Assy, Front	TX-300B
54	5534774000	Button, Power Switch	
	5800004600	Button, Power Switch	TX-300B
55	5534779000	Knob, Lever Switch	
	5800007600	Knob, Lever Switch	TX-300B
56	5555839000	Knob, Tuning	
	5800007700	Knob, Tuning	
57	*5552447000	Plate, Bottom	
58	5534432000	Foot	
59	*5555787000	Bracket, PCB; C	
60	*5534118000	Rivet, Push	
61	*5555789000	Bracket, Muting PCB	
62	*5200001500	PCB Assy, Muting	
63	*5800004200	Bracket, Mother PCB	
64	⚠*5052909000	Spark Killer 0.1 mfd + 120 ohm 300V AC	JAPAN
	⚠*5171606000	Spark Killer 0.01 mfd 125V AC	U.S.A.
	⚠*5052916000	Spark Killer 0.01 mfd 125V AC	CANADA
	⚠*5052907000	Spark Killer 0.01 mfd + 300 ohm 400V AC	GENERAL EXPORT
	⚠*5052917000	Spark Killer 0.01 mfd 450V AC	EUROPE, U.K., AUSTRALIA
Included Accessories			
	5101695000	Owner's Manual	JAPAN
	5101696000	Owner's Manual	U.S.A.
	5101697000	Owner's Manual	All except Japan, U.S.A.
	*5124064000	Antenna, T Type	
	5350007600	Cord, Output	

TX-500/TX-300

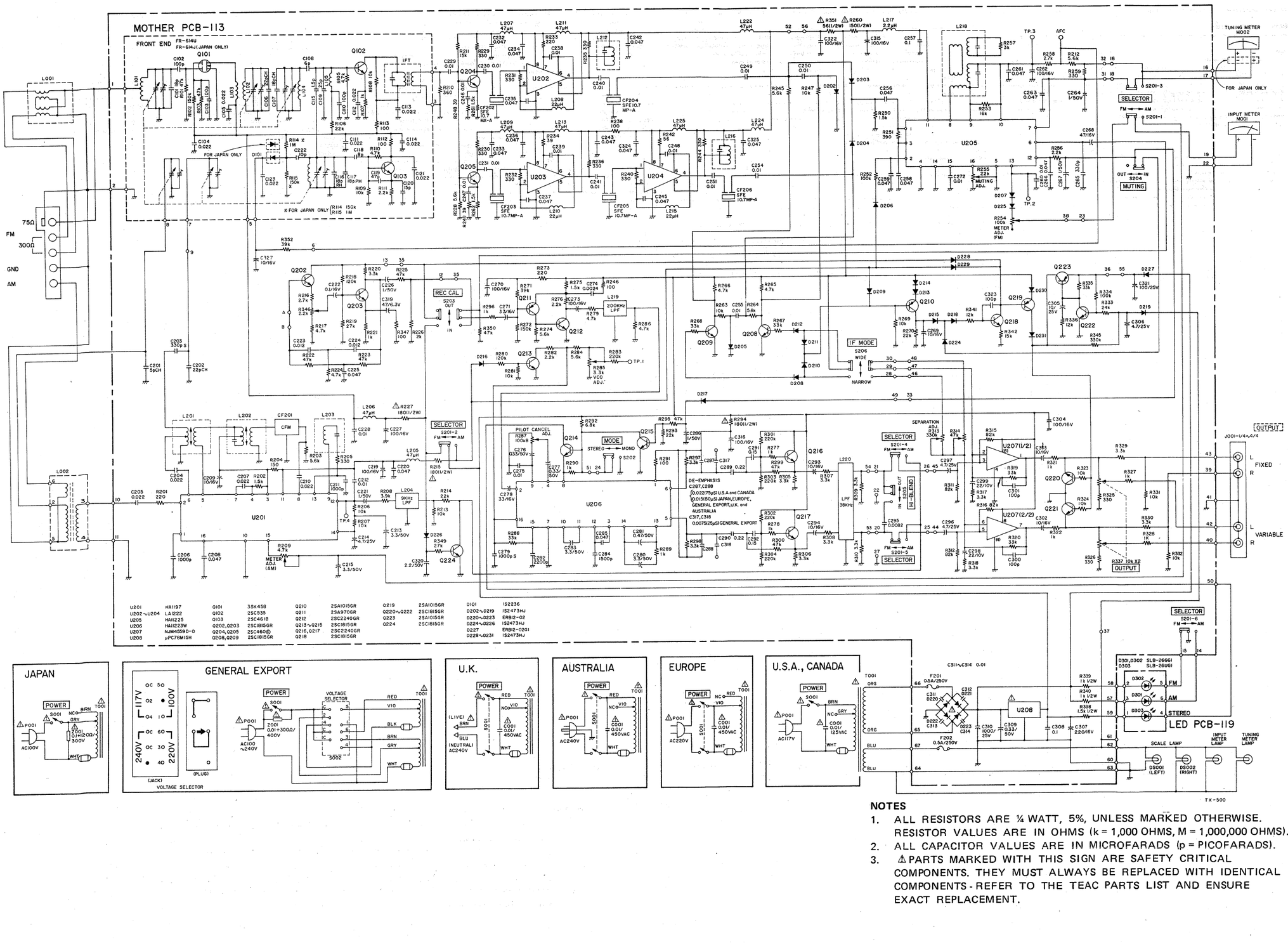
TEAC®

TEAC CORPORATION	3-7-3 NAKA-CHO MUSASHINO TOKYO PHONE (0422) 53-1111
TEAC CORPORATION OF AMERICA	7733 TELEGRAPH ROAD MONTEBELLO CALIFORNIA 90640 PHONE (213) 726-0303
TEAC AUSTRALIA PTY., LTD.	165-167 GLADSTONE STREET SOUTH MELBOURNE VICTORIA 3205 PHONE 699-6000

PRINTED IN JAPAN 0779 SYU 1.8 D-3228A

TEAC SCHEMATIC DIAGRAM

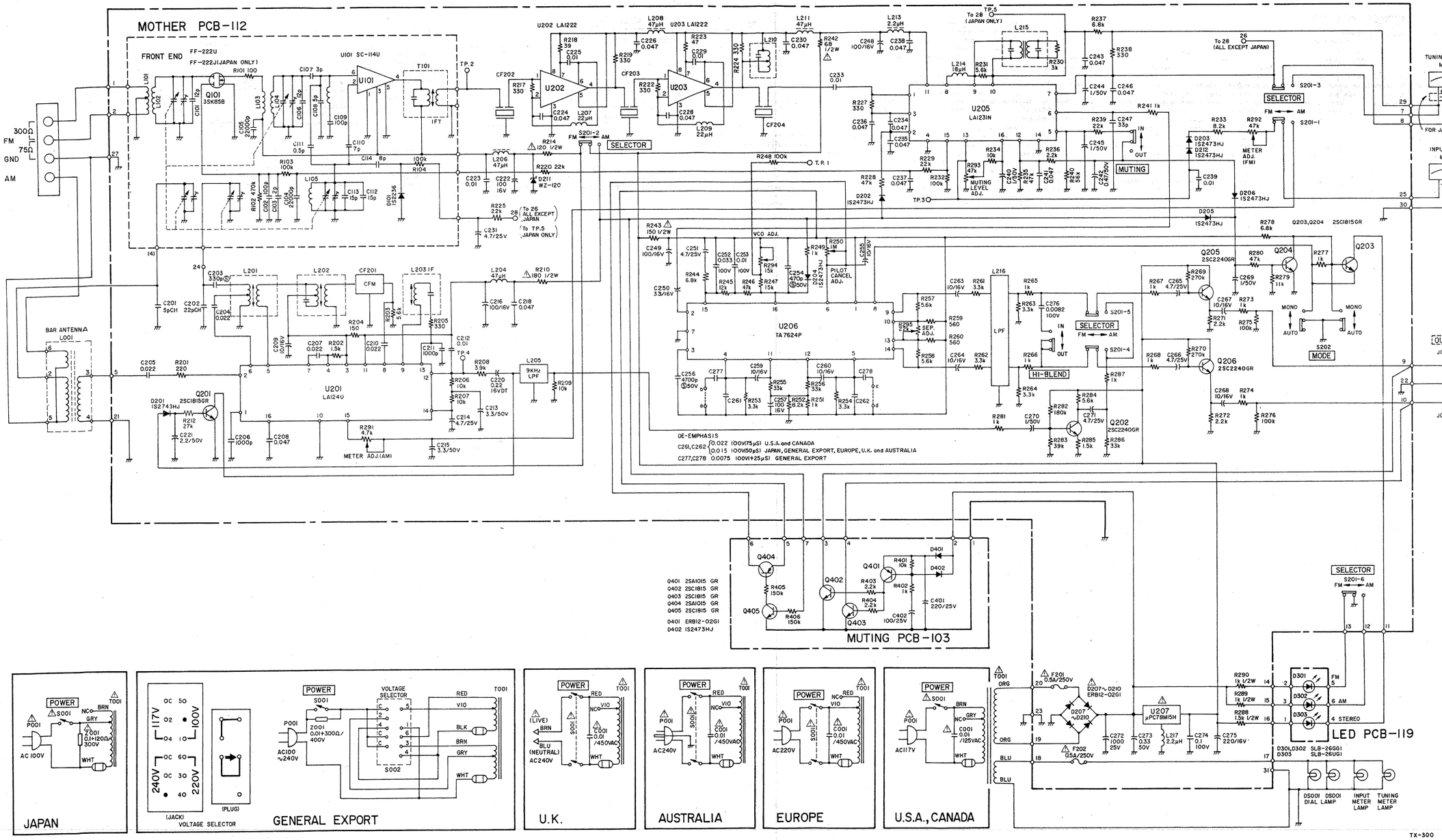
TX-500



U201	HA1197	Q101	3SK458	Q210	2SA1015GR	Q219	2SA1015GR	D101	1S2236
U202~U204	LA1222	Q102	2SC535	Q211	2SA970GR	Q220~Q222	2SC1815GR	D202~D219	1S2473HJ
U205	HA11225	Q103	2SC4618	Q212	2SC2240GR	Q223	2SA1015GR	D220~D223	ERB12-02
U206	HA11223W	Q202,Q203	2SC1815GR	Q213~Q215	2SC1815GR	Q224	2SC1815GR	D224~D226	1S2473HJ
U207	NJM4559D-D	Q204,Q205	2SC460(B)	Q216,Q217	2SC2240GR			D227	ERB12-02GI
U208	µPC78M15H	Q208,Q209	2SC1815GR	Q218	2SC1815GR			D228~D231	1S2473HJ

NOTES

1. ALL RESISTORS ARE ¼ WATT, 5%, UNLESS MARKED OTHERWISE. RESISTOR VALUES ARE IN OHMS (k = 1,000 OHMS, M = 1,000,000 OHMS).
2. ALL CAPACITOR VALUES ARE IN MICROFARADS (p = PICOFARADS).
3. ⚠ PARTS MARKED WITH THIS SIGN ARE SAFETY CRITICAL COMPONENTS. THEY MUST ALWAYS BE REPLACED WITH IDENTICAL COMPONENTS - REFER TO THE TEAC PARTS LIST AND ENSURE EXACT REPLACEMENT.



NOTES

1. ALL RESISTORS ARE ¼ WATT, 5%, UNLESS MARKED OTHERWISE. RESISTOR VALUES ARE IN OHMS (k = 1,000 OHMS, M = 1,000,000 OHMS).
2. ALL CAPACITOR VALUES ARE IN MICROFARADS (p = PICOFARADS).
3. ⚠ PARTS MARKED WITH THIS SIGN ARE SAFETY CRITICAL COMPONENTS. THEY MUST ALWAYS BE REPLACED WITH IDENTICAL COMPONENTS - REFER TO THE TEAC PARTS LIST AND ENSURE EXACT REPLACEMENT.